

# EMISSION SOURCES, EMISSIONS CAPS, AND INDIVIDUAL EMISSION LIMITATIONS

Flexible Permit Numbers 95 and PSD-TX-854

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. 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 *	
			lb/hr	TPY**

### Sources Contributing to Plant NO<sub>x</sub> Emissions

#### Furnace NO<sub>x</sub> Emission Cap

DB-104	Pyrolysis Furnace	NO <sub>x</sub>		
DDB-101A	Pyrolysis Furnace	NO <sub>x</sub>		
DDB-101B	Pyrolysis Furnace	NO <sub>x</sub>		
DDB-101C	Pyrolysis Furnace	NO <sub>x</sub>		
DDB-101D	Pyrolysis Furnace	NO <sub>x</sub>		
DDB-102A	Pyrolysis Furnace	NO <sub>x</sub>		
DDB-102B	Pyrolysis Furnace	NO <sub>x</sub>		
DDB-102C	Pyrolysis Furnace	NO <sub>x</sub>		
DDB-102D	Pyrolysis Furnace	NO <sub>x</sub>		
DDB-104A	Pyrolysis Furnace	NO <sub>x</sub>		
DDB-104B	Pyrolysis Furnace	NO <sub>x</sub>		
DB-105	Pyrolysis Furnace	NO <sub>x</sub>		
DB-106	Pyrolysis Furnace	NO <sub>x</sub>		
DB-107	Pyrolysis Furnace	NO <sub>x</sub>		
DB-108	Pyrolysis Furnace	NO <sub>x</sub>		
DB-109	Pyrolysis Furnace	NO <sub>x</sub>		
DDB-1	Pyrolysis Furnace	NO <sub>x</sub>		
DDB-2	Pyrolysis Furnace	NO <sub>x</sub>		
DDB-3	Pyrolysis Furnace	NO <sub>x</sub>		
DDB-4	Pyrolysis Furnace	NO <sub>x</sub>		
DDB-5	Pyrolysis Furnace	NO <sub>x</sub>		
<b>NO<sub>x</sub> Furnace Emission Cap-Phase I (6)</b>		<b>NO<sub>x</sub></b>	<b>401.91</b>	<b>1703.11</b>

## EMISSION SOURCES, EMISSIONS CAPS, AND INDIVIDUAL EMISSION LIMITATIONS

## AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
NO <sub>x</sub> Furnace Emission Cap-Phase II (7)		NO <sub>x</sub>	284.70	1246.99
<u>Other Source NO<sub>x</sub> Routine Emission Cap</u>				
DM-1101	No. 1 Olefins Flare	NO <sub>x</sub>		
DDM-3101	No. 2 Olefins Flare	NO <sub>x</sub>		
AM-1500	Dock Flare	NO <sub>x</sub>		
J-2	Regeneration Knockout Drum	NO <sub>x</sub>		
DD-606	Hydrotreater Regenerator Stack	NO <sub>x</sub>		
DDD-606	Hydrotreater Regenerator Stack	NO <sub>x</sub>		
DB-201	Regeneration Furnace	NO <sub>x</sub>		
DB-601	Regeneration Heater	NO <sub>x</sub>		
DDB-201	Regeneration Heater	NO <sub>x</sub>		
DDB-601	Regeneration Heater	NO <sub>x</sub>		
J-1	2nd Stage Hydrotreater Feed	NO <sub>x</sub>		
NO <sub>x</sub> Other Source Routine Emission Cap		NO <sub>x</sub>	166.85	86.91
Total NO <sub>x</sub> Routine Emission Plant Cap-Phase I (6)			NO <sub>x</sub>	
		1692.78		
<u>Startup, Shutdown, and Maintenance NO<sub>x</sub> Emissions</u>				
DM-1101/ DDM-3101	Olefin Nos. 1 and 2 Flares Startup, Shutdown, and Maintenance Emissions	NO <sub>x</sub>	1,227.4 0	30.68
<u>Sources Contributing to Plant VOC Emissions</u>				
<u>Furnace VOC Emission Cap</u>				
DB-104	Pyrolysis Furnace	VOC		
DDB-101A	Pyrolysis Furnace	VOC		

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## AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
DDB-101B	Pyrolysis Furnace	VOC		
DDB-101C	Pyrolysis Furnace	VOC		
DDB-101D	Pyrolysis Furnace	VOC		
DDB-102A	Pyrolysis Furnace	VOC		
DDB-102B	Pyrolysis Furnace	VOC		
DDB-102C	Pyrolysis Furnace	VOC		
DDB-102D	Pyrolysis Furnace	VOC		
DDB-104A	Pyrolysis Furnace	VOC		
DDB-104B	Pyrolysis Furnace	VOC		
DB-105	Pyrolysis Furnace	VOC		
DB-106	Pyrolysis Furnace	VOC		
DB-107	Pyrolysis Furnace	VOC		
DB-108	Pyrolysis Furnace	VOC		
DB-109	Pyrolysis Furnace	VOC		
DDB-1	Pyrolysis Furnace	VOC		
DDB-2	Pyrolysis Furnace	VOC		
DDB-3	Pyrolysis Furnace	VOC		
DDB-4	Pyrolysis Furnace	VOC		
DDB-5	Pyrolysis Furnace	VOC		
<b>VOC Furnace Emission Cap-Phase I (6)</b>		<b>VOC</b>	<b>20.66</b>	<b>90.49</b>
<b>VOC Furnace Emission Cap-Phase II (7)</b>		<b>VOC</b>	<b>23.63</b>	<b>103.49</b>
<u>Other Source VOC Routine Emission Cap</u>				
DM-1101	No. 1 Olefins Flare	VOC		
DDM-3101	No. 2 Olefins Flare	VOC		
AM-1500	Dock Flare	VOC		
DF-101	Decoke Stack	VOC		
DF-104	Decoke Stack	VOC		
DF-105	Decoke Stack	VOC		

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
DDF-101	Decoke Stack	VOC		
DDF-104	Decoke Stack	VOC		
DDF-105	Decoke Stack	VOC		
AT-1210	No. 1 Olefins Cooling Tower	VOC		
DAT-3201	No. 2 Olefins Cooling Tower	VOC		
AF-1105	Fixed-Roof Storage Tank	VOC		
AF-1106	Fixed-Roof Storage Tank	VOC		
AF-1905	Fixed-Roof Storage Tank	VOC		
AF-3905	Fixed-Roof Storage Tank	VOC		
DDF-1001	Fixed-Roof Storage Tank	VOC		
DF-1001	Fixed-Roof Storage Tank	VOC		
DF-502	Fixed-Roof Storage Tank	VOC		
DF-916	Fixed-Roof Storage Tank	VOC		
FUELTRK1	No.1 Olefins Truck Loading	VOC		
FUELTRK2	No. 2 Olefins Truck Loading	VOC		
FUELTRK3	Truck Loading Facility	VOC		
AF-1101	External Floating Roof Tank	VOC		
AF-1102	External Floating Roof Tank	VOC		
AF-1901	External Floating Roof Tank	VOC		
AF-1902	External Floating Roof Tank	VOC		
AF-1903	External Floating Roof Tank	VOC		
AF-1904	External Floating Roof Tank	VOC		
AF-3101	External Floating Roof Tank	VOC		
AF-3102	External Floating Roof Tank	VOC		
AF-3901	External Floating Roof Tank	VOC		
AF-1103	Acetonitrile Storage Tank	VOC		
AF-1104	Acetonitrile Storage Tank	VOC		
AF-3103	Acetonitrile Storage Tank	VOC		
DDF-1301	Methanol Storage Tank	VOC		
DDF-202	Methanol Storage Tank	VOC		
DF-1301	Methanol Storage Tank	VOC		

## EMISSION SOURCES, EMISSIONS CAPS, AND INDIVIDUAL EMISSION LIMITATIONS

## AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
AF-3701	Slop	VOC		
AF-4601A	Storm/Process Wastewater Tank	VOC		
AF-4601B	Storm/Process Wastewater Tank	VOC		
FAM1704	No. 1 Olefins Wastewater Facility	VOC		
FUGOF1WW	Fugitive Emissions	VOC		
FAM3706	No. 2 Olefins Wastewater Facility	VOC		
FUG2WWT	Fugitive Emissions	VOC		
FUG-V10F	No. 1 Olefins Unit Fugitives	VOC		
FUG-V20F	No. 2 Olefins Unit Fugitives	VOC		
FUG-FTF	Tank Farm Fugitives	VOC		
FUG-VSSH	Second Stage Hydrotreater	VOC		
FUG-VBD	Marine Dock Fugitives	VOC		
FUG-VCM	Metering Station Fugitives	VOC		
FUG-RAIL	Rail Loading Fugitives	VOC		
FUG-A10F	No. 1 Olefins Analyzer Vent Fug	VOC		
FUG-A20F	No. 2 Olefins Analyzer Vent Fug	VOC		
OF1SOVENT	Seal Oil Vents	VOC		
DB-201	Regeneration Furnace	VOC		
DB-601	Regeneration Heater	VOC		
DDB-201	Regeneration Heater	VOC		
DDB-601	Regeneration Heater	VOC		
P4PEDRYER1	PP4 Dryer Vents (Product Residual VOC)	VOC		
P4PEDRYER2	PP4 Dryer Vents (Product Residual VOC)	VOC		
J-1	2nd Stage Hydrotreater Feed	VOC		
<b>VOC Other Source Routine Emission Cap</b>		<b>VOC</b>	<b>1513.67</b>	<b>689.70</b>
<u>Startup, Shutdown, and Maintenance VOC Emissions</u>				
DM-1101/	Olefin Nos. 1 and 2 Flares Startup,	VOC	3,500.0	87.50

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
DDM-3101	Shutdown, and Maintenance Emissions		0	
FUGOF1WW/ FUG2WWT	Nos. 1 and 2 Olefins Wastewater Unit Cleaning	VOC	40	0.24

**Sources Contributing to Plant CO Emissions****Furnace CO Emission Cap**

DB-104	Pyrolysis Furnace	CO		
DDB-101A	Pyrolysis Furnace	CO		
DDB-101B	Pyrolysis Furnace	CO		
DDB-101C	Pyrolysis Furnace	CO		
DDB-101D	Pyrolysis Furnace	CO		
DDB-102A	Pyrolysis Furnace	CO		
DDB-102B	Pyrolysis Furnace	CO		
DDB-102C	Pyrolysis Furnace	CO		
DDB-102D	Pyrolysis Furnace	CO		
DDB-104A	Pyrolysis Furnace	CO		
DDB-104B	Pyrolysis Furnace	CO		
DB-105	Pyrolysis Furnace	CO		
DB-106	Pyrolysis Furnace	CO		
DB-107	Pyrolysis Furnace	CO		
DB-108	Pyrolysis Furnace	CO		
DB-109	Pyrolysis Furnace	CO		
DDB-1	Pyrolysis Furnace	CO		
DDB-2	Pyrolysis Furnace	CO		
DDB-3	Pyrolysis Furnace	CO		
DDB-4	Pyrolysis Furnace	CO		
DDB-5	Pyrolysis Furnace	CO		
<b>CO Furnace Emission Cap-Phase I (6)</b>		<b>CO</b>	<b>184.22</b>	<b>806.90</b>

## EMISSION SOURCES, EMISSIONS CAPS, AND INDIVIDUAL EMISSION LIMITATIONS

## AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**

<b>CO Furnace Emission Cap-Phase II (7)</b>	<b>CO</b>	<b>200.78</b>	<b>879.41</b>
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Plant Other Source Routine CO Emission Cap

DM-1101	No. 1 Olefins Flare	CO
DDM-3101	No. 2 Olefins Flare	CO
AM-1500	Dock Flare	CO
DF-101	Decoke Stack	CO
DF-104	Decoke Stack	CO
DF-105	Decoke Stack	CO
DDF-101	Decoke Stack	CO
DDF-104	Decoke Stack	CO
DDF-105	Decoke Stack	CO
J-2	Regeneration Knock-out Drum	CO
DD-606	Hydrotreater Regenerator Stack	CO
DDD-606	Hydrotreater Regenerator Stack	CO
DB-201	Regeneration Furnace	CO
DB-601	Regeneration Heater	CO
DDB-201	Regeneration Heater	CO
DDB-601	Regeneration Heater	CO
J-1	2nd Stage Hydrotreater Feed	CO

<b>Other Source CO Emission Cap</b>	<b>CO</b>	<b>1086.54</b>	<b>264.63</b>
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Startup, Shutdown, and Maintenance CO Emissions

DM-1101/ DDM-3101	Olefin Nos. 1 and 2 Flares Startup, Shutdown, and Maintenance Emissions	CO	6254.32	156.36
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Sources Contributing to Plant PM<sub>10</sub> EmissionsFurnace PM<sub>10</sub> Emission Cap

DB-104	Pyrolysis Furnace	PM <sub>10</sub>
DDB-101A	Pyrolysis Furnace	PM <sub>10</sub>

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## AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
DDB-101B	Pyrolysis Furnace	PM <sub>10</sub>		
DDB-101C	Pyrolysis Furnace	PM <sub>10</sub>		
DDB-101D	Pyrolysis Furnace	PM <sub>10</sub>		
DDB-102A	Pyrolysis Furnace	PM <sub>10</sub>		
DDB-102B	Pyrolysis Furnace	PM <sub>10</sub>		
DDB-102C	Pyrolysis Furnace	PM <sub>10</sub>		
DDB-102D	Pyrolysis Furnace	PM <sub>10</sub>		
DDB-104A	Pyrolysis Furnace	PM <sub>10</sub>		
DDB-104B	Pyrolysis Furnace	PM <sub>10</sub>		
DB-105	Pyrolysis Furnace	PM <sub>10</sub>		
DB-106	Pyrolysis Furnace	PM <sub>10</sub>		
DB-107	Pyrolysis Furnace	PM <sub>10</sub>		
DB-108	Pyrolysis Furnace	PM <sub>10</sub>		
DB-109	Pyrolysis Furnace	PM <sub>10</sub>		
DDB-1	Pyrolysis Furnace	PM <sub>10</sub>		
DDB-2	Pyrolysis Furnace	PM <sub>10</sub>		
DDB-3	Pyrolysis Furnace	PM <sub>10</sub>		
DDB-4	Pyrolysis Furnace	PM <sub>10</sub>		
DDB-5	Pyrolysis Furnace	PM <sub>10</sub>		

**PM<sub>10</sub> Furnace Emission Cap-Phase I (6)****PM<sub>10</sub>****31.30****125.04****PM<sub>10</sub> Furnace Emission Cap-Phase II (7)****PM<sub>10</sub>****38.98****143.00**Other Source PM<sub>10</sub> Emission Cap

DF-101	Decoke Stack	PM <sub>10</sub>
DF-104	Decoke Stack	PM <sub>10</sub>
DF-105	Decoke Stack	PM <sub>10</sub>
DDF-101	Decoke Stack	PM <sub>10</sub>
DDF-104	Decoke Stack	PM <sub>10</sub>
DDF-105	Decoke Stack	PM <sub>10</sub>



## EMISSION SOURCES, EMISSIONS CAPS, AND INDIVIDUAL EMISSION LIMITATIONS

## AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
J-2	Regeneration Knockout Drum	PM <sub>10</sub>		
DD-606	Hydrotreater Regenerator Stack	PM <sub>10</sub>		
DDD-606	Hydrotreater Regenerator Stack	PM <sub>10</sub>		
AT-1210	No. 1 Olefins Cooling Tower	PM <sub>10</sub>		
DAT-3201	No. 2 Olefins Cooling Tower	PM <sub>10</sub>		
A-11	Hopper Vent	PM <sub>10</sub>		
A-12	Hopper Vent	PM <sub>10</sub>		
DB-201	Regeneration Furnace	PM <sub>10</sub>		
DB-601	Regeneration Heater	PM <sub>10</sub>		
DDB-201	Regeneration Heater	PM <sub>10</sub>		
DDB-601	Regeneration Heater	PM <sub>10</sub>		
J-1	2nd Stage Hydrotreater Feed Heater	PM <sub>10</sub>		
<b>Other Source PM<sub>10</sub> Emission Cap</b>		<b>PM<sub>10</sub></b>	<b>20.60</b>	<b>38.86</b>

**Sources Contributing to Plant SO<sub>2</sub> Emissions****Furnace SO<sub>2</sub> Emission Cap**

DB-104	Pyrolysis Furnace	SO <sub>2</sub>
DDB-101A	Pyrolysis Furnace	SO <sub>2</sub>
DDB-101B	Pyrolysis Furnace	SO <sub>2</sub>
DDB-101C	Pyrolysis Furnace	SO <sub>2</sub>
DDB-101D	Pyrolysis Furnace	SO <sub>2</sub>
DDB-102A	Pyrolysis Furnace	SO <sub>2</sub>
DDB-102B	Pyrolysis Furnace	SO <sub>2</sub>
DDB-102C	Pyrolysis Furnace	SO <sub>2</sub>
DDB-102D	Pyrolysis Furnace	SO <sub>2</sub>
DDB-104A	Pyrolysis Furnace	SO <sub>2</sub>
DDB-104B	Pyrolysis Furnace	SO <sub>2</sub>
DB-105	Pyrolysis Furnace	SO <sub>2</sub>

## EMISSION SOURCES, EMISSIONS CAPS, AND INDIVIDUAL EMISSION LIMITATIONS

## AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
DB-106	Pyrolysis Furnace	SO <sub>2</sub>		
DB-107	Pyrolysis Furnace	SO <sub>2</sub>		
DB-108	Pyrolysis Furnace	SO <sub>2</sub>		
DB-109	Pyrolysis Furnace	SO <sub>2</sub>		
DDB-1	Pyrolysis Furnace	SO <sub>2</sub>		
DDB-2	Pyrolysis Furnace	SO <sub>2</sub>		
DDB-3	Pyrolysis Furnace	SO <sub>2</sub>		
DDB-4	Pyrolysis Furnace	SO <sub>2</sub>		
DDB-5	Pyrolysis Furnace	SO <sub>2</sub>		
<b>SO<sub>2</sub> Furnace Emission Cap-Phase I (6)</b>		<b>SO<sub>2</sub></b>	<b>53.66</b>	<b>11.75</b>
<b>SO<sub>2</sub> Furnace Emission Cap-Phase II (7)</b>		<b>SO<sub>2</sub></b>	<b>61.37</b>	<b>13.44</b>

Other Source SO<sub>2</sub> Emission Cap

DM-1101	No. 1 Olefins Flare	SO <sub>2</sub>
DDM-3101	No. 2 Olefins Flare	SO <sub>2</sub>
AM-1500	Dock Flare	SO <sub>2</sub>
J-2	Regeneration Knockout Drum	SO <sub>2</sub>
DD-606	Hydrotreater Regenerator Stack	SO <sub>2</sub>
DDD-606	Hydrotreater Regenerator Stack	SO <sub>2</sub>
DB-201	Regeneration Furnace	SO <sub>2</sub>
DB-601	Regeneration Heater	SO <sub>2</sub>
DDB-201	Regeneration Heater	SO <sub>2</sub>
DDB-601	Regeneration Heater	SO <sub>2</sub>
J-1	2nd Stage Hydrotreater Feed Heater	SO <sub>2</sub>

<b>Other Source SO<sub>2</sub> Emission Cap</b>	<b>SO<sub>2</sub></b>	<b>96.15</b>	<b>9.85</b>
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Sources Contributing to Plant NH<sub>3</sub> EmissionsFurnace NH<sub>3</sub> Emission Cap

# EMISSION SOURCES, EMISSIONS CAPS, AND INDIVIDUAL EMISSION LIMITATIONS

## AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
DB-104	Pyrolysis Furnace	NH <sub>3</sub>		
DDB-101A	Pyrolysis Furnace	NH <sub>3</sub>		
DDB-101B	Pyrolysis Furnace	NH <sub>3</sub>		
DDB-101C	Pyrolysis Furnace	NH <sub>3</sub>		
DDB-101D	Pyrolysis Furnace	NH <sub>3</sub>		
DDB-102A	Pyrolysis Furnace	NH <sub>3</sub>		
DDB-102B	Pyrolysis Furnace	NH <sub>3</sub>		
DDB-102C	Pyrolysis Furnace	NH <sub>3</sub>		
DDB-102D	Pyrolysis Furnace	NH <sub>3</sub>		
DDB-104A	Pyrolysis Furnace	NH <sub>3</sub>		
DDB-104B	Pyrolysis Furnace	NH <sub>3</sub>		
DB-105	Pyrolysis Furnace	NH <sub>3</sub>		
DB-106	Pyrolysis Furnace	NH <sub>3</sub>		
DB-107	Pyrolysis Furnace	NH <sub>3</sub>		
DB-108	Pyrolysis Furnace	NH <sub>3</sub>		
DB-109	Pyrolysis Furnace	NH <sub>3</sub>		
DDB-1	Pyrolysis Furnace	NH <sub>3</sub>		
DDB-2	Pyrolysis Furnace	NH <sub>3</sub>		
DDB-3	Pyrolysis Furnace	NH <sub>3</sub>		
DDB-4	Pyrolysis Furnace	NH <sub>3</sub>		
DDB-5	Pyrolysis Furnace	NH <sub>3</sub>		
<b>NH<sub>3</sub> Furnace Emission Cap-Phase I (6)</b>		<b>NH<sub>3</sub></b>	<b>11.93</b>	<b>52.25</b>
<b>NH<sub>3</sub> Furnace Emission Cap-Phase II (7)</b>		<b>NH<sub>3</sub></b>	<b>27.47</b>	<b>120.33</b>

### Other Source Emission Limits

FUG-SCR	SCR System Fugitives	NH <sub>3</sub>	0.11	0.47
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### Sources Contributing to Plant 1,3-Butadiene Emissions

DM-1101	No. 1 Olefins Flare	1,3 Butadiene
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## EMISSION SOURCES, EMISSIONS CAPS, AND INDIVIDUAL EMISSION LIMITATIONS

AIR CONTAMINANTS DATA				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
DDM-3101	No. 2 Olefins Flare	1,3 Butadiene		
AM-1500	Dock Flare	1,3 Butadiene		
DF-101	Decoke Stack	1,3 Butadiene		
DF-104	Decoke Stack	1,3 Butadiene		
DF-105	Decoke Stack	1,3 Butadiene		
DDF-101	Decoke Stack	1,3 Butadiene		
DDF-104	Decoke Stack	1,3 Butadiene		
DDF-105	Decoke Stack	1,3 Butadiene		
AT-1210	No. 1 Olefins Cooling Tower	1,3 Butadiene		
DAT-3201	No. 2 Olefins Cooling Tower	1,3 Butadiene		
AF-4601A	Storm/Process Wastewater Tank	1,3 Butadiene		
AF-4601B	Storm/Process Wastewater Tank	1,3 Butadiene		
FAM1704	No. 1 Olefins Wastewater Facility	1,3 Butadiene		
FUGOF1WW	Fugitive Emissions	1,3 Butadiene		
FAM3706	No. 2 Olefins Wastewater Facility	1,3 Butadiene		
FUG2WWT	Fugitive Emissions	1,3 Butadiene		
FUG-V10F	No. 1 Olefins Unit Fugitives	1,3 Butadiene		
FUG-V20F	No. 2 Olefins Unit Fugitives	1,3 Butadiene		
FUG-VBD	Marine Dock Fugitives	1,3 Butadiene		
FUG-RAIL	Rail Loading Fugitives	1,3 Butadiene		
<b>1,3-Butadiene Routine Emission Cap</b>		<b>1,3-Butadiene</b>	<b>920.05</b>	<b>52.00</b>
<u>Startup, Shutdown, and Maintenance Emissions</u>				
DM-1101/ DDM-3101	Olefin Nos. 1 and 2 Flares Startup, Shutdown, and Maintenance Emissions	1,3-Butadiene	1,050.0 0	17.50
FUGOF1WW/ FUG2WWT	Nos. 1 and 2 Olefins Wastewater Unit Cleaning	1,3 Butadiene	0.01	0.01

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## AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**

**Sources Contributing to Plant Benzene Emissions**

DM-1101	No. 1 Olefins Flare	Benzene
DDM-1301	No. 2 Olefins Flare	Benzene
AM-1500	Dock Flare	Benzene
DF-101	Decoke Stack	Benzene
DF-104	Decoke Stack	Benzene
DF-105	Decoke Stack	Benzene
DDF-101	Decoke Stack	Benzene
DDF-104	Decoke Stack	Benzene
DDF-105	Decoke Stack	Benzene
AT-1210	No. 1 Olefins Cooling Tower	Benzene
DAT-3201	No. 2 Olefins Cooling Tower	Benzene
AF-1105	Fixed-Roof Storage Tank	Benzene
AF-1106	Fixed-Roof Storage Tank	Benzene
AF-1905	Fixed-Roof Storage Tank	Benzene
AF-3905	Fixed-Roof Storage Tank	Benzene
DDF-1001	Fixed-Roof Storage Tank	Benzene
DF-1001	Fixed-Roof Storage Tank	Benzene
DF-502	Fixed-Roof Storage Tank	Benzene
DF-916	Fixed-Roof Storage Tank	Benzene
FUELTRK1	No.1 Olefins Truck Loading	Benzene
FUELTRK2	No. 2 Olefins Truck Loading	Benzene
FUELTRK3	Truck Loading Facility	Benzene
AF-1101	External Floating Roof Tank	Benzene
AF-1102	External Floating Roof Tank	Benzene
AF-1901	External Floating Roof Tank	Benzene
AF-1902	External Floating Roof Tank	Benzene
AF-1903	External Floating Roof Tank	Benzene
AF-1904	External Floating Roof Tank	Benzene
AF-3101	External Floating Roof Tank	Benzene

## EMISSION SOURCES, EMISSIONS CAPS, AND INDIVIDUAL EMISSION LIMITATIONS

AIR CONTAMINANTS DATA				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
AF-3102	External Floating Roof Tank	Benzene		
AF-3901	External Floating Roof Tank	Benzene		
AF-4601A	Storm/Process Wastewater Tank	Benzene		
AF-4601B	Storm/Process Wastewater Tank	Benzene		
FAM1704	No. 1 Olefins Wastewater Facility	Benzene		
FUGOF1WW	Fugitive Emissions	Benzene		
FAM3706	No. 2 Olefins Wastewater Facility	Benzene		
FUG2WWT	Fugitive Emissions	Benzene		
FUG-V10F	No. 1 Olefins Unit Fugitives	Benzene		
FUG-V20F	No. 2 Olefins Unit Fugitives	Benzene		
FUG-FTF	Tank Farm Fugitives	Benzene		
FUG-VSSH	Second Stage Hydrotreater	Benzene		
FUG-VBD	Marine Dock Fugitives	Benzene		
FUG-VCM	Metering Station Fugitives	Benzene		
<b>Benzene Plant Routine Emission Cap</b>		<b>Benzene</b>	<b>18.14</b>	<b>15.49</b>
<u>Startup, Shutdown, and Maintenance Emissions</u>				
FUGOF1WW/ FUG2WWT	Nos. 1 and 2 Olefins Wastewater Unit Cleaning	Benzene	<b>4.00</b>	<b>0.02</b>
<u>Sources Contributing to Plant Ethylene Emissions</u>				
DM-1101	No. 1 Olefins Flare	Ethylene		
DDM-3101	No. 2 Olefins Flare	Ethylene		
DF-101	Decoke Stack	Ethylene		
DF-104	Decoke Stack	Ethylene		
DF-105	Decoke Stack	Ethylene		
DDF-101	Decoke Stack	Ethylene		
DDF-104	Decoke Stack	Ethylene		
DDF-105	Decoke Stack	Ethylene		
AT-1210	No. 1 Olefins Cooling Tower	Ethylene		

## EMISSION SOURCES, EMISSIONS CAPS, AND INDIVIDUAL EMISSION LIMITATIONS

## AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
DAT-3201	No. 2 Olefins Cooling Tower	Ethylene		
FUG-V10F	No. 1 Olefins Unit Fugitives	Ethylene		
FUG-V20F	No. 2 Olefins Unit Fugitives	Ethylene		

**Ethylene Plant Routine Emission Cap**

<b>Ethylene</b>	<b>317.65</b>	<b>96.23</b>
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Startup, Shutdown, and Maintenance Emissions

DM-1101/ DDM-3101	Olefin Nos. 1 and 2 Flares Startup, Shutdown, and Maintenance Emissions	Ethylene	3,500.0 0	78.75
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Sources Contributing to Plant Propylene Emissions

DM-1101	No. 1 Olefins Flare	Propylene
DDM-3101	No. 2 Olefins Flare	Propylene
AM-1500	Dock Flare	Propylene
DF-101	Decoke Stack	Propylene
DF-104	Decoke Stack	Propylene
DF-105	Decoke Stack	Propylene
DDF-101	Decoke Stack	Propylene
DDF-104	Decoke Stack	Propylene
DDF-105	Decoke Stack	Propylene
AT-1210	No. 1 Olefins Cooling Tower	Propylene
DAT-3201	No. 2 Olefins Cooling Tower	Propylene
FUG-V10F	No. 1 Olefins Unit Fugitives	Propylene
FUG-V20F	No. 2 Olefins Unit Fugitives	Propylene
FUG-VBD	Marine Dock Fugitives	Propylene
FUG-RAIL	Rail Loading Fugitives	Propylene
P4PEDRYER1	PP4 Dryer Vents (Product Residual VOC)	Propylene

EMISSION SOURCES, EMISSIONS CAPS, AND INDIVIDUAL EMISSION LIMITATIONS

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
P4PEDRYER2	PP4 Dryer Vents (Product Residual VOC)	Propylene		
<b>Propylene Plant Routine Emission Cap</b>		<b>Propylene</b>	<b>551.95</b>	<b>117.93</b>
<u>Startup, Shutdown, and Maintenance Emissions</u>				
DM-1101/ DDM-3101	Olefin Nos. 1 and 2 Flares Startup, Shutdown, and Maintenance Emissions	Propylene	3,500.0 0	78.75



EMISSION SOURCES, EMISSIONS CAPS, AND INDIVIDUAL EMISSION  
LIMITATIONS

- (1) Emission point identification - either specific equipment designation or emission point number from a plot plan.
- (2) Specific point source names. For fugitive sources, use an area name or fugitive source name.
- (3) NO<sub>x</sub> - total oxides of nitrogen  
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1.  
CO - carbon monoxide  
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 PM greater than 10 microns is emitted.  
SO<sub>2</sub> - sulfur dioxide  
NH<sub>3</sub> - ammonia
- (4) RESERVED.
- (5) RESERVED.
- (6) Emission Cap through October 31, 2007.
- (7) Emission Cap After October 31, 2007.

\* Emission rates are based on and the facilities are limited by the following maximum operating schedule:

24 Hrs/day 7 Days/week 52 Weeks/year or 8,760 Hrs/year

\*\* Compliance with annual emission limits is based on a rolling 12-month period.

Dated June 8, 2006