

## EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS

Flexible Permit Numbers 22690 and PSD-TX-751M1

This table lists the emission caps and individual emission limitations for all sources of air contaminants on the applicant's property covered by this permit. The emission caps and individual emission limitations shown are those derived from information submitted as part of the application for permit and allowed for these facilities. Any proposed change in emission caps or individual emission limitations will require an application for a modification of the facilities covered by this permit.

### AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminate Name (3)	Emission Cap or Individual Emission Limit **	
			lb/hr	TPY

### CO SOURCES

#### **Ethylene Unit 22**

22-36-1	22 Furnace 1	CO
22-36-2	22 Furnace 2	CO
22-36-3	22 Furnace 3	CO
22-36-4	22 Furnace 4	CO
22-36-5	22 Furnace 5	CO
22-36-6	22 Furnace 6	CO
22-36-7	22 Furnace 7	CO
22-36-8	22 Furnace 8	CO

#### **Ethylene Unit 24**

24-36-1	24 Furnace 1	CO
24-36-2	24 Furnace 2	CO
24-36-3	24 Furnace 3	CO
24-36-4	24 Furnace 4	CO
24-36-5	24 Furnace 5	CO
24-36-6	24 Furnace 6	CO
24-36-7	24 Steam Superheater 7	CO
24-36-8	24 DAC Hydrotreater Heater 8	CO
24-36-9	24 Furnace 9	CO

## EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS

### AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminate Name (3)	Emission Cap or Individual Emission Limit **	
			lb/hr	TPY
Ethylene Unit 33				
33-36-1	33 Furnace 1	CO (7)		
33-36-2	33 Furnace 2	CO (7)		
33-36-3	33 Furnace 3	CO (7)		
33-36-4	33 Furnace 4	CO (7)		
33-36-5	33 Furnace 5	CO (7)		
33-36-6	33 Furnace 6	CO (7)		
33-36-7	33 Furnace 7	CO (7)		
33-36-8	33 Furnace 8	CO (7)		
33-36-9	33 Furnace 9	CO (7)		
Flare System				
56-61-10	Unit 21, 22 Low-Pressure Flare (Flare 10)	CO		
56-61-12	Unit 22 High-Pressure Flare (Flare 12)	CO		
56-61-14	Unit 24 High-Pressure Flare (Flare 14)	CO		
56-61-20	Unit 24 Low-Pressure Flare (Flare 20)	CO		
56-61-22	Unit 33 Process Flare (Flare 22)	CO (7)		
	Emission Cap	CO	478.74	2096.19

## EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS

### AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminate Name (3)	Emission Cap or Individual Emission Limit **	
			lb/hr	TPY

#### Decoking Equipment - Start-Up, Shutdown, and Maintenance

22-95-(3, 3A, 3B, and 3C)	U22 Decoke	CO		
24-95-300	U24 Decoke	CO		
33-95-376 and 376A	U33 Decoke	CO		
	<b>Emission Cap</b>	<b>CO</b>	<b>792.82</b>	<b>89.86</b>

#### Flare System

56-61-4	Unit 10D/18 Process Flare (Flare 4)	CO		
56-61-8	Unit 10, 12 Low-Pressure Flare (Flare 8)	CO		
56-61-9	Unit 10, 12 High-Pressure Flare (Flare 9)	CO		
	<b>Emission Cap</b>	<b>CO</b>	<b>1.92</b>	<b>7.93</b>

#### Flare System - Start-Up, Shutdown, and Maintenance

56-61-4	Unit 10D/18 Process Flare (Flare 4)	CO		
56-61-8	Unit 10, 12 Low-Pressure Flare (Flare 8)	CO		
56-61-9	Unit 10, 12 High-Pressure Flare (Flare 9)	CO		
56-61-10	Unit 21, 22 Low-Pressure Flare (Flare 10)	CO		
56-61-12	Unit 22 High-Pressure Flare	CO		

## EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS

### AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminate Name (3)	Emission Cap or Individual Emission Limit **	
			lb/hr	TPY
56-61-14	(Flare 12) Unit 24 High-Pressure Flare	CO		
56-61-20	(Flare 14) Unit 24 Low-Pressure Flare	CO		
56-61-22	(Flare 20) Unit 33 Process Flare (Flare 22)	CO		
	<b>Emission Cap</b>	<b>CO</b>	<b>2575.67</b>	<b>33.13</b>

### H<sub>2</sub>S SOURCES

#### **Flare System**

56-61-4	Unit 10D/18 Process Flare (Flare 4)	H <sub>2</sub> S		
56-61-8	Unit 10, 12 Low-Pressure Flare (Flare 8)	H <sub>2</sub> S		
56-61-9	Unit 10, 12 High-Pressure Flare (Flare 9)	H <sub>2</sub> S		
56-61-10	Unit 21, 22 Low-Pressure Flare (Flare 10)	H <sub>2</sub> S		
56-61-12	Unit 22 High-Pressure Flare (Flare 12)	H <sub>2</sub> S		
56-61-14	Unit 24 High-Pressure Flare (Flare 14)	H <sub>2</sub> S		
56-61-20	Unit 24 Low-Pressure Flare (Flare 20)	H <sub>2</sub> S		
56-61-22	Unit 33 Process Flare (Flare 22)	H <sub>2</sub> S		
	<b>Emission Cap</b>	<b>H<sub>2</sub>S</b>	<b>0.06</b>	<b>0.26</b>

## EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS

### AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminate Name (3)	Emission Cap or Individual Emission Limit **	
			lb/hr	TPY

### NO<sub>x</sub> SOURCES

#### Ethylene Unit 22

22-36-1	22 Furnace 1	NO <sub>x</sub>
22-36-2	22 Furnace 2	NO <sub>x</sub>
22-36-3	22 Furnace 3	NO <sub>x</sub>
22-36-4	22 Furnace 4	NO <sub>x</sub>
22-36-5	22 Furnace 5	NO <sub>x</sub>
22-36-6	22 Furnace 6	NO <sub>x</sub>
22-36-7	22 Furnace 7	NO <sub>x</sub>
22-36-8	22 Furnace 8	NO <sub>x</sub>
22-7-1	Boiler No. 10/Propylene Turbine	NO <sub>x</sub>
22-95-27	Turbine Alone	NO <sub>x</sub>

#### Ethylene Unit 24

24-36-1	24 Furnace 1	NO <sub>x</sub>
24-36-2	24 Furnace 2	NO <sub>x</sub>
24-36-3	24 Furnace 3	NO <sub>x</sub>
24-36-4	24 Furnace 4	NO <sub>x</sub>
24-36-5	24 Furnace 5	NO <sub>x</sub>
24-36-6	24 Furnace 6	NO <sub>x</sub>
24-36-7	24 Steam Superheater 7	NO <sub>x</sub>
24-36-8	24 DAC Hydrotreater Heater 8	NO <sub>x</sub>
24-36-9	24 Furnace 9	NO <sub>x</sub>

## EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS

### AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminate Name (3)	Emission Cap or Individual Emission Limit **	
			lb/hr	TPY
Ethylene Unit 33				
33-36-1	33 Furnace 1	NO <sub>x</sub> (7)		
33-36-2	33 Furnace 2	NO <sub>x</sub> (7)		
33-36-3	33 Furnace 3	NO <sub>x</sub> (7)		
33-36-4	33 Furnace 4	NO <sub>x</sub> (7)		
33-36-5	33 Furnace 5	NO <sub>x</sub> (7)		
33-36-6	33 Furnace 6	NO <sub>x</sub> (7)		
33-36-7	33 Furnace 7	NO <sub>x</sub> (7)		
33-36-8	33 Furnace 8	NO <sub>x</sub> (7)		
33-36-9	33 Furnace 9	NO <sub>x</sub> (7)		
Flare System				
56-61-10	Unit 21, 22 Low-Pressure Flare (Flare 10)	NO <sub>x</sub>		
56-61-12	Unit 22 High-Pressure Flare (Flare 12)	NO <sub>x</sub>		
56-61-14	Unit 24 High-Pressure Flare (Flare 14)	NO <sub>x</sub>		
56-61-20	Unit 24 Low-Pressure Flare (Flare 20)	NO <sub>x</sub>		
56-61-22	Unit 33 Process Flare (Flare 22)	NO <sub>x</sub> (7)		
	Emission Cap	NO <sub>x</sub>	481.90	2110.59

## EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS

### AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminate Name (3)	Emission Cap or Individual Emission Limit **	
			lb/hr	TPY

#### Flare System

56-61-4	Unit 10D/18 Process Flare (Flare 4)	NO <sub>x</sub>		
56-61-8	Unit 10, 12 Low-Pressure Flare (Flare 8)	NO <sub>x</sub>		
56-61-9	Unit 10, 12 High-Pressure Flare (Flare 9)	NO <sub>x</sub>		
	<b>Emission Cap</b>	<b>NO<sub>x</sub></b>	<b>0.37</b>	<b>1.54</b>

#### Flare System - Start-Up, Shutdown, and Maintenance

56-61-4	Unit 10D/18 Process Flare (Flare 4)	NO <sub>x</sub>
56-61-8	Unit 10, 12 Low-Pressure Flare (Flare 8)	NO <sub>x</sub>
56-61-9	Unit 10, 12 High-Pressure Flare (Flare 9)	NO <sub>x</sub>
56-61-10	Unit 21, 22 Low-Pressure Flare (Flare 10)	NO <sub>x</sub>
56-61-12	Unit 22 High-Pressure Flare (Flare 12)	NO <sub>x</sub>
56-61-14	Unit 24 High-Pressure Flare (Flare 14)	NO <sub>x</sub>
56-61-20	Unit 24 Low-Pressure Flare (Flare 20)	NO <sub>x</sub>
56-61-22	Unit 33 Process Flare (Flare 22)	NO <sub>x</sub>

## EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS

### AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminate Name (3)	Emission Cap or Individual Emission Limit **	
			lb/hr	TPY
	<b>Emission Cap</b>	<b>NO<sub>x</sub></b>	<b>857.09</b>	<b>6.12</b>

### PM/PM<sub>10</sub> SOURCES

#### Cooling Towers

54-22-5	Unit 12 Cooling Tower (CT-5)	PM		
54-22-6	Unit 10ABC Cooling Tower (CT-6)	PM		
54-22-7	Unit 10ABC Cooling Tower (CT-7)	PM		
54-22-9	Unit 10D/18 Cooling Tower (CT-9)	PM		
54-22-12	Unit 21/22 Cooling Tower (CT-12)	PM		
54-22-13	Unit 24 Cooling Tower (CT-13)	PM		
54-22-17	Unit 33 Cooling Tower (CT-17)	PM		
	<b>Emission Cap</b>	<b>PM</b>	<b>27.16</b>	<b>118.97</b>

#### Ethylene Unit 22

22-36-1	22 Furnace 1	PM <sub>10</sub>
22-36-2	22 Furnace 2	PM <sub>10</sub>
22-36-3	22 Furnace 3	PM <sub>10</sub>
22-36-4	22 Furnace 4	PM <sub>10</sub>
22-36-5	22 Furnace 5	PM <sub>10</sub>
22-36-6	22 Furnace 6	PM <sub>10</sub>
22-36-7	22 Furnace 7	PM <sub>10</sub>
22-36-8	22 Furnace 8	PM <sub>10</sub>



## EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS

### AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminate Name (3)	Emission Cap or Individual Emission Limit **	
			lb/hr	TPY

#### Ethylene Unit 24

24-36-1	24 Furnace 1	PM <sub>10</sub>
24-36-2	24 Furnace 2	PM <sub>10</sub>
24-36-3	24 Furnace 3	PM <sub>10</sub>
24-36-4	24 Furnace 4	PM <sub>10</sub>
24-36-5	24 Furnace 5	PM <sub>10</sub>
24-36-6	24 Furnace 6	PM <sub>10</sub>
24-36-7	24 Steam Superheater 7	PM <sub>10</sub>
24-36-8	24 DAC Hydrotreater Heater 8	PM <sub>10</sub>
24-36-9	24 Furnace 9	PM <sub>10</sub>

#### Ethylene Unit 33

33-36-1	33 Furnace 1	PM <sub>10</sub> (7)
33-36-2	33 Furnace 2	PM <sub>10</sub> (7)
33-36-3	33 Furnace 3	PM <sub>10</sub> (7)
33-36-4	33 Furnace 4	PM <sub>10</sub> (7)
33-36-5	33 Furnace 5	PM <sub>10</sub> (7)
33-36-6	33 Furnace 6	PM <sub>10</sub> (7)
33-36-7	33 Furnace 7	PM <sub>10</sub> (7)
33-36-8	33 Furnace 8	PM <sub>10</sub> (7)
33-36-9	33 Furnace 9	PM <sub>10</sub> (7)

<b>Emission Cap</b>	<b>PM<sub>10</sub></b>	<b>41.44</b>	<b>181.52</b>
---------------------	------------------------	--------------	---------------

## EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS

### AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminate Name (3)	Emission Cap or Individual Emission Limit **	
			lb/hr	TPY
Start-Up, Shutdown, and Maintenance				
22-95-(3, 3A, 3B, and 3C)	U22 Decoke	PM		
24-95-300	U24 Decoke	PM		
33-95-376 and 376A	U33 Decoke	PM		
CPC-ABLAST	Abrasive Blasting	PM		
CPC-PAINT	Painting	PM		
	Emission Cap	PM	621.89	67.66

### SO<sub>2</sub> SOURCES

#### Ethylene Unit 22

22-36-1	22 Furnace 1	SO <sub>2</sub>
22-36-2	22 Furnace 2	SO <sub>2</sub>
22-36-3	22 Furnace 3	SO <sub>2</sub>
22-36-4	22 Furnace 4	SO <sub>2</sub>
22-36-5	22 Furnace 5	SO <sub>2</sub>
22-36-6	22 Furnace 6	SO <sub>2</sub>
22-36-7	22 Furnace 7	SO <sub>2</sub>
22-36-8	22 Furnace 8	SO <sub>2</sub>

## EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS

### AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminate Name (3)	Emission Cap or Individual Emission Limit **	
			lb/hr	TPY

#### Ethylene Unit 24

24-36-1	24 Furnace 1	SO <sub>2</sub>
24-36-2	24 Furnace 2	SO <sub>2</sub>
24-36-3	24 Furnace 3	SO <sub>2</sub>
24-36-4	24 Furnace 4	SO <sub>2</sub>
24-36-5	24 Furnace 5	SO <sub>2</sub>
24-36-6	24 Furnace 6	SO <sub>2</sub>
24-36-7	24 Steam Superheater 7	SO <sub>2</sub>
24-36-8	24 DAC Hydrotreater Heater 8	SO <sub>2</sub>
24-36-9	24 Furnace 9	SO <sub>2</sub>

#### Ethylene Unit 33

33-36-1	33 Furnace 1	SO <sub>2</sub> (7)
33-36-2	33 Furnace 2	SO <sub>2</sub> (7)
33-36-3	33 Furnace 3	SO <sub>2</sub> (7)
33-36-4	33 Furnace 4	SO <sub>2</sub> (7)
33-36-5	33 Furnace 5	SO <sub>2</sub> (7)
33-36-6	33 Furnace 6	SO <sub>2</sub> (7)
33-36-7	33 Furnace 7	SO <sub>2</sub> (7)
33-36-8	33 Furnace 8	SO <sub>2</sub> (7)
33-36-9	33 Furnace 9	SO <sub>2</sub> (7)

<b>Emission Cap</b>	<b>SO<sub>2</sub></b>	<b>223.95</b>	<b>374.53</b>
---------------------	-----------------------	---------------	---------------

## EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS

### AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminate Name (3)	Emission Cap or Individual Emission Limit **	
			lb/hr	TPY
Flare System				
56-61-4	Unit 10D/18 Process Flare (Flare 4)	SO <sub>2</sub>		
56-61-8	Unit 10, 12 Low-Pressure Flare (Flare 8)	SO <sub>2</sub>		
56-61-9	Unit 10, 12 High-Pressure Flare (Flare 9)	SO <sub>2</sub>		
56-61-10	Unit 21, 22 Low-Pressure Flare (Flare 10)	SO <sub>2</sub>		
56-61-12	Unit 22 High-Pressure Flare (Flare 12)	SO <sub>2</sub>		
56-61-14	Unit 24 High-Pressure Flare (Flare 14)	SO <sub>2</sub>		
56-61-20	Unit 24 Low-Pressure Flare (Flare 20)	SO <sub>2</sub>		
56-61-22	Unit 33 Process Flare (Flare 22)	SO <sub>2</sub> (7)		
	Emission Cap	SO <sub>2</sub>	18.05	24.72

### VOC SOURCES

#### **Ethylene Unit 22**

22-36-1	22 Furnace 1	VOC
---------	--------------	-----

## EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS

### AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminate Name (3)	Emission Cap or Individual Emission Limit **	
			lb/hr	TPY
22-36-2	22 Furnace 2	VOC		
22-36-3	22 Furnace 3	VOC		
22-36-4	22 Furnace 4	VOC		
22-36-5	22 Furnace 5	VOC		
22-36-6	22 Furnace 6	VOC		
22-36-7	22 Furnace 7	VOC		
22-36-8	22 Furnace 8	VOC		

### Ethylene Unit 24

24-36-1	24 Furnace 1	VOC
24-36-2	24 Furnace 2	VOC
24-36-3	24 Furnace 3	VOC
24-36-4	24 Furnace 4	VOC
24-36-5	24 Furnace 5	VOC
24-36-6	24 Furnace 6	VOC
24-36-7	24 Steam Superheater 7	VOC
24-36-8	24 DAC Hydrotreater Heater 8	VOC
24-36-9	24 Furnace 9	VOC

### Ethylene Unit 33

33-36-1	33 Furnace 1	VOC
33-36-2	33 Furnace 2	VOC
33-36-3	33 Furnace 3	VOC
33-36-4	33 Furnace 4	VOC
33-36-5	33 Furnace 5	VOC
33-36-6	33 Furnace 6	VOC
33-36-7	33 Furnace 7	VOC
33-36-8	33 Furnace 8	VOC
33-36-9	33 Furnace 9	VOC

## EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS

### AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminate Name (3)	Emission Cap or Individual Emission Limit **	
			lb/hr	TPY

#### Process Fugitive Equipment

10.1-0-0	Unit 10AC Process Fugitives (4)	VOC
10.2-0-0	Unit 10D Process Fugitives (4)	VOC
10.3-0-0	Unit 10B Process Fugitives (4)	VOC
12-0-0	Unit 12 Process Fugitives (4)	VOC
18-0-0	Unit 18 Process Fugitives (4)	VOC
21-0-0	Unit 21 Process Fugitives (4)	VOC
24.1-0-0	Unit 24.1 Process Fugitives (4)	VOC
22-0-0	Unit 22 Process Fugitives (4)	VOC
24-0-0	Unit 24 Process Fugitives (4)	VOC
33-0-0	Unit 33 Process Fugitives (4)	VOC

#### Cooling Towers

54-22-5	Unit 12 Cooling Tower (CT-5)	VOC
54-22-6	Unit 10ABC Cooling Tower (CT-6)	VOC
54-22-7	Unit 10ABC Cooling Tower (CT-7)	VOC
54-22-9	Unit 10D/18 Cooling Tower (CT-9)	VOC
54-22-12	Unit 21/22 Cooling Tower (CT-12)	VOC
54-22-13	Unit 24 Cooling Tower (CT-13)	VOC
54-22-17	Unit 33 Cooling Tower (CT-17)	VOC

## EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS

### AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminate Name (3)	Emission Cap or Individual Emission Limit **	
			lb/hr	TPY

#### Fixed-Roof Storage Tanks

24-95-314	Methanol Storage Tank	VOC
33-95-10	Methanol Storage Tank	VOC
33-95-14	TBC Storage Tank	VOC

#### Lube/Seal Reservoirs

10-95-328	D-328 Seal Oil Reservoir	VOC
10-95-357	D-357 Lube/Seal Oil Reservoir	VOC
18-95-54	D-54 Lube/Seal Oil Reservoir	VOC
21-95-120	D-120 Lube/Seal Oil Reservoir	VOC
22-95-100	D-100 Lube Oil Reservoir	VOC
22-95-101	D-101 Seal Oil Reservoir	VOC
22-95-120	D-120 Lube/Seal Oil Reservoir	VOC
22-95-130	D-130 Lube/Seal Oil Reservoir	VOC
24-95-304	D-304 Lube/Seal Oil Reservoir	VOC
24-95-305	D-305 Lube/Seal Oil Reservoir	VOC
24-95-306	D-306 Lube/Seal Oil Reservoir	VOC
24-95-307	Expander Lube Oil Reservoir	VOC
33-95-15	C-101 (Cracked Gas)	VOC
33-95-17	C-102 (Ethylene)	VOC
33-95-19	C-103 (Propylene)	VOC
33-95-390	C-101 (Cracked Gas)	VOC
33-95-392	C-102 (Ethylene)	VOC
33-95-394	C-103 (Propylene)	VOC
10-95-3572	C-357 (Propylene)- 2nd vent	VOC
10-95-357A	C-357 (Propylene)- degas chamber	VOC
24-95-319	C-100 (Cracked Gas)	VOC

## EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS

### AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminate Name (3)	Emission Cap or Individual Emission Limit **	
			lb/hr	TPY
24-95-320	C-101 (Ethylene)	VOC		
24-95-321	C-102 (Propylene)	VOC		

### Sumps

10.1-SUMP1	10.1 Oily Water Sewer Sump	VOC
12-SUMP1	12 Oily Water Sewer Sump	VOC
21/22-SUMP1	21/22 Oily Water Sewer Sump	VOC
24-SUMP2	24 Ethylene Sodium Hydroxide Sump	VOC
24-SUMP3	24 Oily Water Sewer Sump	VOC
33-SUMP1	33 Sodium Hydroxide Sump	VOC
33-SUMP2	33 Water Sludge Pit	VOC
33-SUMP3	33 Oily Water Sewer Sump	VOC
33-SUMP4	33 Blowdown Drum Sump	VOC

### Flare System

56-61-4	Unit 10D/18 Process Flare (Flare 4)	VOC
56-61-8	Unit 10, 12 Low-Pressure Flare (Flare 8)	VOC
56-61-9	Unit 10, 12 High-Pressure Flare (Flare 9)	VOC



## EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS

### AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminate Name (3)	Emission Cap or Individual Emission Limit **	
			lb/hr	TPY
56-61-10	Unit 21, 22 Low-Pressure Flare (Flare 10)	VOC		
56-61-12	Unit 22 High-Pressure Flare (Flare 12)	VOC		
56-61-14	Unit 24 High-Pressure Flare (Flare 14)	VOC		
56-61-20	Unit 24 Low-Pressure Flare (Flare 20)	VOC		
56-61-22	Unit 33 Process Flare (Flare 22)	VOC		

### Atmospheric Vents

10ABC-AV	Unit 10ABC Analyzer Vents	VOC		
10D-AV	Unit 10D Analyzer Vents	VOC		
12-AV	Unit 12 Analyzer Vents	VOC		
18-AV	Unit 18 Analyzer Vents	VOC		
21-AV	Unit 21 Analyzer Vents	VOC		
22-AV	Unit 22 Analyzer Vents	VOC		
24-AV	Unit 24 Analyzer Vents	VOC		
33-AV	Unit 33 Analyzer Vents	VOC		
<b>Emission Cap</b>		<b>VOC</b>	<b>127.95</b>	<b>528.67</b>

### Start-Up, Shutdown, and Maintenance

56-61-4	Unit 10D/18 Process Flare (Flare 4)	VOC
56-61-8	Unit 10, 12 Low-Pressure Flare (Flare 8)	VOC
56-61-9	Unit 10, 12 High-Pressure Flare (Flare 9)	VOC

## EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS

			AIR CONTAMINANTS DATA	
Emission Point No. (1)	Source Name (2)	Air Contaminate Name (3)	Emission Cap or Individual Emission Limit **	
			lb/hr	TPY
56-61-10	Unit 21, 22 Low-Pressure Flare (Flare 10)	VOC		
56-61-12	Unit 22 High-Pressure Flare (Flare 12)	VOC		
56-61-14	Unit 24 High-Pressure Flare (Flare 14)	VOC		
56-61-20	Unit 24 Low-Pressure Flare (Flare 20)	VOC		
56-61-22	Unit 33 Process Flare (Flare 22)	VOC		
CPC-Paint	Painting	VOC		
	<b>Emission Cap</b>	<b>VOC</b>	<b>3466.47</b>	<b>54.86</b>
<b>Benzene Sources (5)</b>				
10.1-0-0	Unit 10AC Process Fugitives (4)	Benzene		
10.2-0-0	Unit 10D Process Fugitives (4)	Benzene		
10.3-0-0	Unit 10B Process Fugitives (4)	Benzene		
12-0-0	Unit 12 Process Fugitives (4)	Benzene		
21-0-0	Unit 21 Process Fugitives (4)	Benzene		
24.1-0-0	Unit 24.1 Process Fugitives (4)	Benzene		
22-0-0	Unit 22 Process Fugitives (4)	Benzene		
24-0-0	Unit 24 Process Fugitives (4)	Benzene		
33-0-0	Unit 33 Process Fugitives (4)	Benzene		
	<b>Emission Cap</b>	<b>Benzene</b>	<b>1.74</b>	<b>7.60</b>
<b>Start-Up, Shutdown, and Maintenance</b>				
56-61-4	Unit 10D/18 Process Flare (Flare 4)	Benzene		
56-61-8	Unit 10, 12 Low-Pressure Flare (Flare 8)	Benzene		
56-61-9	Unit 10, 12 High-Pressure Flare	Benzene		

## EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS

AIR CONTAMINANTS DATA				
Emission Point No. (1)	Source Name (2)	Air Contaminate Name (3)	Emission Cap or Individual Emission Limit **	
			lb/hr	TPY
56-61-10	(Flare 9) Unit 21, 22 Low-Pressure Flare	Benzene		
56-61-12	(Flare 10) Unit 22 High-Pressure Flare	Benzene		
56-61-14	(Flare 12) Unit 24 High-Pressure Flare	Benzene		
56-61-20	(Flare 14) Unit 24 Low-Pressure Flare	Benzene		
56-61-22	(Flare 20) Unit 33 Process Flare (Flare 22)	Benzene		
	<b>Emission Cap</b>	<b>Benzene</b>	<b>74.60</b>	<b>0.93</b>
22-7-1	Boiler No. 10 (Boiler and Turbine Combined) (6)	CO	21.54	94.34
		PM <sub>10</sub>	3.94	17.24
		SO <sub>2</sub>	16.69	73.10
		VOC	3.65	15.97
22-95-27	Propylene Compressor Turbine (operating alone) (6)	CO	7.01	30.72
		PM <sub>10</sub>	0.84	3.70
		SO <sub>2</sub>	0.44	1.91
		VOC	1.41	6.17
24-AIRCOMP	Unit 24 Diesel Engine	VOC	0.87	0.71
		NO <sub>x</sub>	6.09	4.96
		CO	7.53	6.14
		SO <sub>2</sub>	0.62	0.50
		PM <sub>10</sub>	0.36	0.29
33-AIRCOMP	Unit 33 Diesel Engine	VOC	0.14	0.11
		NO <sub>x</sub>	6.10	4.97
		CO	0.05	0.04
		SO <sub>2</sub>	0.01	0.01
		PM <sub>10</sub>	0.07	0.05

## EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS

- (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)
  - CO - carbon monoxide
  - H<sub>2</sub>S - hydrogen sulfide
  - NO<sub>x</sub> - total oxides of nitrogen
  - PM - particulate matter, suspended in the atmosphere, greater than 10 microns in diameter.
  - PM<sub>10</sub> - particulate matter 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
  - VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) Benzene from other facilities is included in the VOC cap and does not contribute to the benzene emission cap.
- (6) Emission Point Nos. 22-7-1 and 22-95-27 do not emit at the same time.
- (7) PSD-TX-751M1 pollutant

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

EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS

Hrs/day 24 Days/week 7 Weeks/year 52

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

Dated November 13, 2006