

EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS (Initial CAP)

Flexible Permit Numbers 1176 and PSD-TX-782

This table lists the maximum allowable emission caps or rates and all sources of air contaminants 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

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

CO Sources

Combustion Sources:

HF-201	PX-1 ISOM Heater H-101	CO
HF-203	PX-1 Reboilers H-103/104	CO
F-204	PX-1 LAF/TDP Furnace H-501	CO
HF-451	PX-2 ISOM Heater H-1101	CO
HF-453	PX-2 H-Reboilers 1103/1104	CO
HF-601	MX-2 Heater H-102	CO
HF-602	MX-2 Heater H-201	CO

Flare Systems:

FL-201	PX-1 Flare	CO
FL-401	PX-2 Flare	CO
FL-351	POLYB Flare	CO

Emission Cap	CO	47.91	221.67
---------------------	-----------	--------------	---------------

NO_x Sources

Combustion Sources:

HF-201	PX-1 ISOM Heater H-101	NO _x
HF-203	PX-1 Reboilers H-103/104	NO _x
F-204	PX-1 LAF/TDP Furnace H-501	NO _x
HF-451	PX-2 ISOM Heater H-1101	NO _x

EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS (Initial CAP)

AIR CONTAMINANTS DATA

<u>Emission Rates*</u>	Source	Air Contaminant	<u>Emission</u>	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**
HF-453	PX-2 H-Reboilers 1103/1104	NO _x		
HF-601	MX-2 Heater H-102	NO _x		
Combustion Sources (continued):				
HF-602	MX-2 Heater H-201	NO _x		
Flare Systems:				
FL-201	PX-1 Flare	NO _x		
FL-401	PX-2 Flare	NO _x		
FL-351	POLYB Flare	NO _x		
	Emission Cap	NO_x	64.77	262.11

PM₁₀ Sources

Combustion Sources:

HF-201	PX-1 ISOM Heater H-101	PM ₁₀
HF-203	PX-1 Reboilers H-103/104	PM ₁₀
F-204	PX-1 LAF/TDP Furnace H-501	PM ₁₀
HF-451	PX-2 ISOM Heater H-1101	PM ₁₀
HF-453	PX-2 H-Reboilers 1103/1104	PM ₁₀
HF-601	MX-2 Heater H-102	PM ₁₀
HF-602	MX-2 Heater H-201	PM ₁₀

Cooling Towers:

CT-451	PX-2, MX-2 Cooling Tower	PM ₁₀
CT-351	PX-3, POLYB Cooling Tower	PM ₁₀

Emission Cap	PM₁₀	8.02	35.15
---------------------	------------------------	-------------	--------------

EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS
(Initial CAP)

AIR CONTAMINANTS DATA				
Emission Rates*	Source	Air Contaminant	<u>Emission</u>	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**

SO₂ Sources

Combustion Sources:

HF-201	PX-1 ISOM Heater H-101	SO ₂
HF-203	PX-1 Reboilers H-103/104	SO ₂
F-204	PX-1 LAF/TDP Furnace H-501	SO ₂
HF-451	PX-2 ISOM Heater H-1101	SO ₂
HF-453	PX-2 H-Reboilers 1103/1104	SO ₂
HF-601	MX-2 Heater H-102	SO ₂
HF-602	MX-2 Heater H-201	SO ₂

Flare Systems:

FL-201	PX-1 Flare	SO ₂
FL-401	PX-2 Flare	SO ₂
FL-351	POLYB Flare	SO ₂

Emission Cap	SO₂	0.42	1.82
---------------------	-----------------------	-------------	-------------

VOC Sources

Combustion Sources:

HF-201	PX-1 ISOM Heater H-101	VOC
HF-203	PX-1 Reboilers H-103/104	VOC
F-204	PX-1 LAF/TDP Furnace H-501	VOC
HF-451	PX-2 ISOM Heater H-1101	VOC
HF-453	PX-2 H-Reboilers 1103/1104	VOC
HF-601	MX-2 Heater H-102	VOC

EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS
(Initial CAP)

			AIR CONTAMINANTS DATA	
Emission <u>Rates*</u>	Source	Air Contaminant	<u>Emission</u>	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**
HF-602	MX-2 Heater H-201	VOC		
Separators:				
FS-201	PX-1 Separator	VOC		
S-451	PX-2 Separator	VOC		
Regenerator Vent:				
LPV-452	PX-2 Regeneration Vent	VOC		
Flare Systems:				
FL-201	PX-1 Flare	VOC		
FL-401	PX-2 Flare	VOC		
FL-351	POLYB Flare	VOC		
Loading:				
SP-50	Recovery Dock 50	VOC		
SP-51	Recovery Dock 51	VOC		
SP-52	Recovery Dock 52	VOC		
SP-54	HAB Truck Loading 54	VOC		
SP-201	PX-1 Truck Loading	VOC		
Fugitives:				
FU-201	PX-1 Fugitives	VOC		
FU-451	PX-2 Fugitives	VOC		
FU-551	PX-3 Fugitives	VOC		
FU-152	Dock Fugitives	VOC		

EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS
(Initial CAP)

AIR CONTAMINANTS DATA

<u>Emission Rates*</u>	Source	Air Contaminant	<u>Emission</u>	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**
FU-210	PX-1 LAF Fugitives	VOC		
Cooling Towers:				
CT-451	PX-2, MX-2 Cooling Tower	VOC		
CT-351	PX-3, POLYB Cooling Tower	VOC		
Tanks:				
F-411	Utilities	VOC		
ST-201	PX-1 Tank TF-111	VOC		
ST-202	PX-1 Tank TF-112	VOC		
ST-203	PX-1 Tank TF-113	VOC		
ST-204	PX-1 Tank TF-114	VOC		
ST-205	PX-1 Tank TF-115	VOC		
ST-206	PX-1 Tank TF-117	VOC		
ST-207	PX-1 Tank TF-118	VOC		
ST-208	PX-1 Tank TF-120	VOC		
ST-209	PX-1 Tank TF-121	VOC		
ST-210	PX-1 Tank TF-116	VOC		
ST-451	PX-2 Tank F-1117	VOC		
ST-452	PX-2 Tank F-1111	VOC		
ST-453	PX-2 Tank F-1112	VOC		
ST-454	PX-2 Tank F-1113	VOC		
ST-455	PX-2 Tank F-1114	VOC		
ST-457	PX-2 Tank F-1118	VOC		
ST-2113	PX-3 Tank TF-2113	VOC		
ST-2114	PX-3 Tank TF-2114	VOC		
ST-2118	PX-3 Tank TF-2118	VOC		
ST-151	Dock Tank TK-201	VOC		
ST-152	Dock Tank TK-202	VOC		

EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS
(Initial CAP)

		AIR CONTAMINANTS DATA		
Emission Rates*	Source	Air Contaminant	<u>Emission</u>	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**
ST-153	Dock Tank TK-203	VOC		
ST-154	Dock Tank TK-204	VOC		
ST-155	Dock Tank TK-205	VOC		
ST-156	Dock Tank TK-206	VOC		
ST-157	Dock Tank TK-207	VOC		
ST-159	Dock Tank TK-208	VOC		
ST-161	Dock Tank TK-401	VOC		
ST-162	Dock Tank TK-402	VOC		
Emission Cap		VOC	283.37	388.10
		Benzene	6.80	29.75
		Styrene	18.98	26.12

EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS
(Initial CAP)

		AIR CONTAMINANTS DATA		
Emission Rates*	Source	Air Contaminant	<u>Emission</u>	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**
H₂SO₄ Source				
Loading Operation:				
SP-54A	Dock 54A	H ₂ SO ₄		

EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS
(Initial CAP)

		AIR CONTAMINANTS DATA		
<u>Emission Rates*</u>	Source	Air Contaminant	<u>Emission</u>	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**

Emission Cap	H₂SO₄	0.001	0.001
---------------------	------------------------------------	--------------	--------------

HCl Source

Combustion Source:

FL-201	PX-1 Flare (4)	HCl		
	Emission Cap	HCl	0.5	2.1

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point 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
 PM₁₀ - 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.
 CO - carbon monoxide
 H₂SO₄ - sulfuric acid
 HCL - hydrogen chloride
- (4) Emissions of HCL from EPN FL-201 are combustion emissions associated with pressure relief emissions of ethyl chloride from single pressurized Storage Tank identified as MS-101 associated with Permit Numbers 8978 and PSD-TX-459M3.

* These initial cap 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.

EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS
(Initial CAP)

AIR CONTAMINANTS DATA

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

Dated January 24, 2007

EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS
(FINAL CAP, effective December 31, 2007)

Flexible Permit Numbers 1176 and PSD-TX-782

This table lists the maximum allowable emission caps or rates and all sources of air contaminants 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 *	Source	Air Contaminant	Emission Rates	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**

CO Sources

Combustion Sources:

HF-201	PX-1 ISOM Heater H-101	CO
HF-203	PX-1 Reboilers H-103/104	CO
F-204	PX-1 LAF/TDP Furnace H-501	CO
HF-451	PX-2 ISOM Heater H-1101	CO
HF-453	PX-2 H-Reboilers 1103/1104	CO
HF-601	MX-2 Heater H-102	CO
HF-602	MX-2 Heater H-201	CO

Flare Systems:

FL-201	PX-1 Flare	CO
FL-401	PX-2 Flare	CO
FL-351	POLYB Flare	CO

Emission Cap	CO	36.42	171.33
--------------	----	-------	--------

NO_x Sources

Combustion Sources:

HF-201	PX-1 ISOM Heater H-101	NO _x
HF-203	PX-1 Reboilers H-103/104	NO _x
F-204	PX-1 LAF/TDP Furnace H-501	NO _x
HF-451	PX-2 ISOM Heater H-1101	NO _x
HF-453	PX-2 H-Reboilers 1103/1104	NO _x
HF-601	MX-2 Heater H-102	NO _x

EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS
(FINAL CAP, effective December 31, 2007)

AIR CONTAMINANTS DATA

Emission * Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates</u> lb/hr TPY**	
HF-602	MX-2 Heater H-201	NO _x		

Flare Systems:

FL-201	PX-1 Flare	NO _x		
FL-401	PX-2 Flare	NO _x		
FL-351	POLYB Flare	NO _x		
	Emission Cap	NO_x	39.00	158.54

PM₁₀ Sources

Combustion Sources:

HF-201	PX-1 ISOM Heater H-101	PM ₁₀
HF-203	PX-1 Reboilers H-103/104	PM ₁₀
F-204	PX-1 LAF/TDP Furnace H-501	PM ₁₀
HF-451	PX-2 ISOM Heater H-1101	PM ₁₀
HF-453	PX-2 H-Reboilers 1103/1104	PM ₁₀
HF-601	MX-2 Heater H-102	PM ₁₀
HF-602	MX-2 Heater H-201	PM ₁₀

Cooling Towers:

CT-451	PX-2, MX-2 Cooling Tower	PM ₁₀		
CT-351	PX-3, POLYB Cooling Tower	PM ₁₀		
	Emission Cap	PM₁₀	9.06	39.68

SO₂ Sources

EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS
(FINAL CAP, effective December 31, 2007)

AIR CONTAMINANTS DATA

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

Combustion Sources:

HF-201	PX-1 ISOM Heater H-101	SO ₂		
HF-203	PX-1 Reboilers H-103/104	SO ₂		
F-204	PX-1 LAF/TDP Furnace H-501	SO ₂		
HF-451	PX-2 ISOM Heater H-1101	SO ₂		
HF-453	PX-2 H-Reboilers 1103/1104	SO ₂		
HF-601	MX-2 Heater H-102	SO ₂		
HF-602	MX-2 Heater H-201	SO ₂		

Flare Systems:

FL-201	PX-1 Flare	SO ₂		
FL-401	PX-2 Flare	SO ₂		
FL-351	POLYB Flare	SO ₂		

Emission Cap	SO₂	0.51	2.23
---------------------	-----------------------	-------------	-------------

VOC Sources

Combustion Sources:

HF-201	PX-1 ISOM Heater H-101	VOC		
HF-203	PX-1 Reboilers H-103/104	VOC		
F-204	PX-1 LAF/TDP Furnace H-501	VOC		
HF-451	PX-2 ISOM Heater H-1101	VOC		
HF-453	PX-2 H-Reboilers 1103/1104	VOC		
HF-601	MX-2 Heater H-102	VOC		
HF-602	MX-2 Heater H-201	VOC		

Separators:

FS-201	PX-1 Separator	VOC		
S-451	PX-2 Separator	VOC		

Regenerator Vent:

LPV-452	PX-2 Regeneration Vent	VOC		
---------	------------------------	-----	--	--

EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS
(FINAL CAP, effective December 31, 2007)

AIR CONTAMINANTS DATA

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

Flare Systems:

FL-201	PX-1 Flare	VOC		
FL-401	PX-2 Flare	VOC		
FL-351	POLYB Flare	VOC		

Loading:

SP-50	Recovery Dock 50	VOC		
SP-51	Recovery Dock 51	VOC		
SP-52	Recovery Dock 52	VOC		
SP-54	HAB Truck Loading 54	VOC		
SP-201	PX-1 Truck Loading	VOC		

Fugitives:

FU-201	PX-1 Fugitives	VOC		
FU-451	PX-2 Fugitives	VOC		
FU-551	PX-3 Fugitives	VOC		
FU-152	Dock Fugitives	VOC		
FU-210	PX-1 LAF Fugitives	VOC		

Cooling Towers:

CT-451	PX-2, MX-2 Cooling Tower	VOC		
CT-351	PX-3, POLYB Cooling Tower	VOC		

Tanks:

F-411	Utilities	VOC		
ST-201	PX-1 Tank TF-111	VOC		

EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS
(FINAL CAP, effective December 31, 2007)

AIR CONTAMINANTS DATA

Emission * Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates</u> lb/hr TPY**	
ST-202	PX-1 Tank TF-112	VOC		
ST-203	PX-1 Tank TF-113	VOC		
ST-204	PX-1 Tank TF-114	VOC		
ST-205	PX-1 Tank TF-115	VOC		
ST-206	PX-1 Tank TF-117	VOC		
ST-207	PX-1 Tank TF-118	VOC		
ST-208	PX-1 Tank TF-120	VOC		
ST-209	PX-1 Tank TF-121	VOC		
ST-210	PX-1 Tank TF-116	VOC		
ST-451	PX-2 Tank F-1117	VOC		
ST-452	PX-2 Tank F-1111	VOC		
ST-453	PX-2 Tank F-1112	VOC		
ST-454	PX-2 Tank F-1113	VOC		
ST-455	PX-2 Tank F-1114	VOC		
ST-457	PX-2 Tank F-1118	VOC		
ST-2113	PX-3 Tank TF-2113	VOC		
Tanks: (continued)				
ST-2114	PX-3 Tank TF-2114	VOC		
ST-2118	PX-3 Tank TF-2118	VOC		
ST-151	Dock Tank TK-201	VOC		
ST-152	Dock Tank TK-202	VOC		
ST-153	Dock Tank TK-203	VOC		
ST-154	Dock Tank TK-204	VOC		
ST-155	Dock Tank TK-205	VOC		
ST-156	Dock Tank TK-206	VOC		
ST-157	Dock Tank TK-207	VOC		
ST-159	Dock Tank TK-208	VOC		
ST-161	Dock Tank TK-401	VOC		
ST-162	Dock Tank TK-402	VOC		
F-411	Utilities Tank 411	VOC		
Emission Cap		VOC	261.30	322.01
		Benzene	6.79	29.71
		Styrene	19.85	31.56

H₂SO₄ Source

EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS
(FINAL CAP, effective December 31, 2007)

AIR CONTAMINANTS DATA

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

Loading Operation:

SP-54A	Dock 54A	H ₂ SO ₄		
	Emission Cap	H₂SO₄	0.001	0.001

CI Source

Combustion Source:

L-201	PX-1 Flare (4)	HCl		
	Emission Cap	HCl	0.5	2.1

EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS
(FINAL CAP, effective December 31, 2007)

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point 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
- PM₁₀ - 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.
- CO - carbon monoxide
- H₂SO₄ - sulfuric acid

HCl - hydrogen chloride

- (4) Emissions of HCL from EPN FL-201 are combustion emissions associated with pressure relief emissions of ethyl chloride from single pressurized storage tank identified as MS-101 associated with Permit Numbers 8978 and PSD-TX-459M3.

*These initial cap 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