EMISSION SOURCES, EMISSIONS CAPS, AND INDIVIDUAL EMISSION LIMITATIONS

Flexible Permit Nos. 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**
DM-1101	No. 1 Olefins Flare	SO_2	0.01	0.02
AT-1210	No. 1 Olefins Cooling Tower	VOC	4.14	18.13
		PM_{10}	2.47	10.81
DAT-3201	No. 2 Olefins Cooling Tower	VOC	5.52	24.18
		PM_{10}	3.29	14.41
FUG-V10F	No. 1 Olefins Unit Fugitives	VOC	21.99	96.30
FUG-V20F	No. 2 Olefins Unit Fugitives	VOC	21.64	94.79
FUG-A10F	No. 1 Olefins Analyzer Vent Fugitives	VOC	0.01	0.01
FUG-A20F	No. 2 Olefins Analyzer Vent Fugitives	VOC	0.01	0.01
FUG-FTF	Tank Farm Fugitives	VOC	1.00	4.38
FUG-VSSH	Second Stage Hydrotreater Fugitives	VOC	1.09	4.77
FUG-VBD	Marine Dock Fugitives	VOC	0.09	0.40
FUG-VCM	Metering Station Fugitives	VOC	0.31	1.38
FUG-RAIL	Rail Loading Fugitives	VOC	0.10	0.43
FUELTRK1	No.1 Olefins Truck Loading	VOC	11.05	1.23
FUELTRK2	No. 2 Olefins Truck Loading	VOC	11.05	1.53
AF-1215	Bleach Tank	NaOCl	0.04	0.01
AF-3215	Bleach Tank	CL2	0.03	0.01
AF-3701	Slop Tank	VOC	5.07	0.14
		acetonitrile	0.61	0.01
AF-1103	Acetonitrile Tank	acetonitrile	0.06	0.11
AF-1104	Acetonitrile Tank	acetonitrile	0.06	0.11
AF-1105	Rerun Bottoms Tank	VOC	2.31	4.41
		Benzene	0.01	0.01
		Toluene	0.01	0.01
AF-1106	Rerun Bottoms Tank	VOC	2.31	2.77
		Benzene	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**
		Toluene	0.01	0.01
AF-1905	Fuel Oil Tank	VOC	0.54	1.81
AF-3103	Acetonitrile Tank	acetonitrile	0.06	0.10
AF-3905	Fuel Oil Tank	VOC	0.54	2.25
DDF-1001	Fuel Oil Tank	VOC	1.06	0.27
DDF-1301	Methanol Tank	VOC	2.35	0.03
DDF-202	Methanol Tank	VOC	3.90	0.06
DDF-701	Sodium Nitrite Solution Tank	VOC	6.50	0.06
DDF-705	Sodium Nitrite Solution Tank	VOC	6.50	0.05
DF-1001	Fuel Oil Tank	VOC	1.70	4.15
DF-1301	Alcohol Tank	VOC	3.52	0.09
DF-502	Lube Oil Storage	VOC	0.71	0.20
DF-701	Sodium Nitrite Solution Tank	VOC	2.60	0.11
DF-702	Sodium Nitrite Solution Tank	VOC	0.69	0.06
		acetonitrile	0.69	0.06
DF-705	Sodium Nitrite Solution Tank	VOC	0.69	0.02
		acetonitrile	0.69	0.01
DF-916	Lube Oil Storage	VOC	0.60	0.02
DF-104	Decoke Stack	CO	73.00	3.18
		PM_{10}	0.74	0.02
		VOC	0.09	0.40
DDF-101	Decoke Stack	CO	36.50	7.20
		PM_{10}	6.20	1.50
DDF-104	Decoke Stack	CO	73.00	3.18
		PM_{10}	0.80	0.02
DF-105	Decoke Stack	PM_{10}	8.25	0.83
		CO	38.50	3.85
DDF-105	Decoke Stack	PM_{10}	8.25	0.83
		CO	38.50	3.85
AM-1500	Dock Flare	CO	0.19	0.84
		NO_X	0.07	0.29
		PM_{10}	0.01	0.02
		Butadine	0.04	0.16
		Propylene	0.03	0.14
DD-606	Hydrotreater Regenerator Stack	CO	10.00	1.40

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
		SO_2	45.80	3.30
DDD-606	Hydrotreater Regenerator Stack	CO	10.00	1.40
		SO_2	45.80	3.30
DDM-3101	No. 2 Olefins Flare	NO_X	3.06	1.88
		CO	15.61	9.55
		SO_2	0.01	0.02
		VOC	200.01	122.39
DDZ-902	Lime Silo Filter Vent	PM_{10}	0.01	0.01
DZ-902	Lime Silo Filter Vent	PM_{10}	3.00	0.05
OF1SOVENT	Seal Oil Vents	VOC	0.30	0.10
RAILLOAD	Rail Loading Fugitives	VOC	10.58	1.15
DB-201	Regeneration Furnace	NO_X	5.90	25.60
		CO	2.10	9.20
		PM_{10}	0.30	1.20
		SO_2	0.52	0.11
		VOC	0.20	0.70
DB-601	Regeneration Heater	NO_X	0.81	3.55
		CO	0.29	1.28
		PM_{10}	0.04	0.16
		SO_2	0.07	0.02
		VOC	0.02	0.09
DDB-201	Regeneration Heater	NO_X	5.85	20.50
		CO	2.10	9.30
		PM_{10}	0.30	1.20
		SO_2	0.50	0.10
		VOC	0.15	0.70
DDB-601	Regeneration Heater	NO_X	0.81	2.84
		CO	0.28	1.23
		PM_{10}	0.04	0.15
		SO_2	0.07	0.02
		VOC	0.02	0.09

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-1	2nd Stage Hydrotreater Feed Heater	NO_X	0.58	2.53
		CO	0.12	0.53
		PM_{10}	0.07	0.30
		SO_2	0.08	0.02
		VOC	0.02	0.10

FURNACE EMISSION CAPS

The Furnace Emission Cap includes the Olefins Furnaces (Emission Point Nos. [EPNs] DB-104, DB-105, DB-106, DB-107, DB-108, DB-109, DDB-1, DDB-2, DDB-3, DDB-4, DDB-5, DDB-101A, DDB-101B, DDB-101C, DDB-101D, DDB-102A, DDB-102B, DDB-102C, and DDB-102D) and the Liquid Furnaces (EPNs DDB-104-A and DDB-104-B).

NO_X CAP	Furnace Emission Cap	NO_X	284.70	1246.99
VOC CAP	Furnace Emission Cap	VOC	23.63	103.49
CO CAP	Furnace Emission Cap	CO	200.78	879.41
PM_{10} CAP	Furnace Emission Cap	PM_{10}	32.65	143.00
SO_2 CAP	Furnace Emission Cap	SO_2	61.37	13.44
NH_3 CAP	Furnace Emission Cap	NH_3	27.47	120.33

TANK EMISSION CAPS

VOC CAP	EFR TANK CAP	VOC	8.33	35.16
Benzene CAP	EFR TANK CAP	Benzene	0.47	1.90
Toluene CAP	EFR TANK CAP	Toluene	0.08	0.26
Hexane CAP	EFR TANK CAP	Hexane	0.35	1.42
Styrene CAP	EFR TANK CAP	Styrene	0.01	0.01
Xylene CAP	EFR TANK CAP	Xylene	0.02	0.07
Ethylbenzene	EFR TANK CAP	Ethylbenze	0.005	0.02

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**
CAP		ne		

The Tank Emission Caps include the following sources:

EPN	Source
AF-1101	Liquid Feed Tank
AF-1102	Liquid Feed Tank
AF-1901	Crude Benzene Tank
AF-1902	Gasoline Product Tank
AF-1903	Gasoline Product Tank
AF-1904	Crude Benzene Tank
AF-3101	Liquid Feed Tank
AF-3102	Liquid Feed Tank
AF-3901	Pyrolysis Gasoline Storage Tank

(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) VOC - volatile organic compounds as defined in 30 Texas Administrative Code Section 101.1
NO_X - total oxides of nitrogen
SO_2 - sulfur dioxide
PM - particulate matter, suspended in the atmosphere, including PM_{10}.
PM_{10} - particulate matter 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.
CO - carbon monoxide
NaOC1 - sodium hypochlorite
Cl_2 - chlorine
(4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.

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**

* 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.