Emission Sources, Emissions Caps, and Individual Emission Limitations

Flexible Permit Numbers 16989 and PSD-TX-794

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, sources, and related activities. 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)
Aromatics and Olefins Plant, Aromatics Unit (AU)		
Cooling Tower Sources		
AUCHXUCLTR	AU Cooling Tower	VOC, Benzene, Toluene
Flares		
AUFLARE-1	AU Flare	CO, NO_x, SO_2, VOC, Benzene, Toluene
AUFLARE-2	CHX Loading Rack Flare	CO, NO_x, SO_2, VOC, Benzene, Toluene
Process Fugitive Areas		
AUFUGS	AU Fugitives	VOC, Benzene, Toluene
Combustion Sources		
AUHEATER-1	Clay Tower Heater	CO, NO_x, PM_{10}, SO_2, VOC
Miscellaneous Sources		
AUWWFUGS	AU Wastewater Fugitives	VOC, Benzene, Toluene
Tanks		
AUT33979	Tank 33979	VOC, Benzene, Toluene
AUT4865	Tank 4865	VOC, Benzene, Toluene
AUT4866	Tank 4866	VOC, Benzene, Toluene
AUT4867	Tank 4867	VOC, Benzene, Toluene
AUT4868	Tank 4868	VOC, Benzene, Toluene
AUT4880	Tank 4880	VOC, Benzene, Toluene
AUT4881	Tank 4881	VOC, Benzene, Toluene

Emission Sources - Maximum Allowable Emission Rates

AUT4882	Tank 4882	VOC, Benzene, Toluene
AUT4883	Tank 4883	VOC, Benzene, Toluene
AUT4884	Tank 4884	VOC, Benzene, Toluene
AUT4930	Tank 4930	VOC, Benzene, Toluene
Aromatics and Olefins Plant, Cyclohexane Unit (CHXU)		
Process Fugitive Areas		
CHXUFUGS	Cyclohexane Unit Fugitives	VOC, Benzene, Toluene
Loading		
CHXUTCLR	CHXU Uncaptured Loading Fugitives	VOC, Benzene, Toluene
Aromatics and Olefins Plant, Light Olefins Unit (LOU)		
Cooling Tower Sources		
LOUCOOLTWR	LOU Cooling Tower	VOC, Benzene, Toluene
Flares		
LOUFLARE	LOU Elevated Flare	CO, NO_x, SO_2, VOC, Benzene, Toluene
Process Fugitive Areas		
LOUFUGS	LOU Fugitives	VOC, Benzene, Toluene
Combustion Sources		
LOUBOILER1	Cracking Furnace A	CO, NO_x, PM_{10}, SO_2, VOC
LOUBOILER10	Superheater B	CO, NO_x, PM_{10}, SO_2, VOC
LOUBOILER11	Cracking Furnace H	CO, NO_x, PM_{10}, SO_2, VOC
LOUBOILER2	Cracking Furnace B	CO, NO_x, PM_{10}, SO_2, VOC
LOUBOILER3	Cracking Furnace C	CO, NO_x, PM_{10}, SO_2, VOC
LOUBOILER4	Cracking Furnace D	CO, NO_x, PM_{10}, SO_2, VOC

Emission Sources - Maximum Allowable Emission Rates

LOUBOILER5	Cracking Furnace E	CO, NO_x, PM_{10}, SO_2, VOC
LOUBOILER6	Cracking Furnace F	CO, NO_x, PM_{10}, SO_2, VOC
LOUBOILER7	Cracking Furnace G	CO, NO_x, PM_{10}, SO_2, VOC
LOUBOILER8	Ethane Cracking Furnace	CO, NO_x, PM_{10}, SO_2, VOC
LOUBOILER9	Superheater A	CO, NO_x, PM_{10}, SO_2, VOC
LOUHEATER1	GHU Regeneration Heater	CO, NO_x, PM_{10}, SO_2, VOC
LOUHEATER2	PHU Heater	CO, NO_x, PM_{10}, SO_2, VOC
Loading		
LOUPFOLR	LOU Loading Rack	VOC, Benzene, Toluene
Miscellaneous Sources		
ABRSVCLEAN	Abrasive Blasting Area	PM_{10}
AOMPANTFUG	Plant Painting Operations	VOC, Benzene, Toluene
DGREASEOPS	Degreasing Operations	VOC, Benzene, Toluene
LOUAPIVO	API Thermal Oxidizer	CO, NO_x, PM_{10}, SO_2, VOC, Benzene, Toluene
LOUVENTDD1	LOU Decoking Drum No. 1	CO, PM_{10}
LOUVENTDD2	LOU Decoking Drum No. 2	CO, PM_{10}
LOUCARBON1	API Carbon Adsorption System	VOC, Benzene, Toluene
AOARVS	Analyzer, Atmospheric Reference Valve	VOC, Benzene, Toluene, PM_{10}, CO, NO_x
Tanks		
10T-112	Tank 112	VOC, Benzene, Toluene
10T-113	Tank 113	VOC, Benzene, Toluene

Emission Sources - Maximum Allowable Emission Rates

LOUT1596	Tank 1596	VOC, Benzene, Toluene
LOUT1597	Tank 1597	VOC, Benzene, Toluene
LOUT33752	Tank 33752	VOC, Benzene, Toluene
LOUT33753	Tank 33753	VOC, Benzene, Toluene
LOUT33755	Tank 33755	VOC, Benzene, Toluene
LOUT33756	Tank 33756	VOC, Benzene, Toluene
LOUT33758	Tank 33758	VOC, Benzene, Toluene
LOUT33759	Tank 33759	VOC, Benzene, Toluene
LOUT33760	Tank 33760	VOC, Benzene, Toluene
Aromatics and Olefins Plant, Miscellaneous Sources		
Fuel Dispensing Units and Associated Tanks (5)		VOC, Benzene, Toluene
Miscellaneous Chemical Storage Tanks (5)		VOC, Benzene, Toluene
Diesel Internal Combustion Engines (5)		CO, NO_x, PM_{10}, SO_2, VOC
Motiva Tank Farm (MOT)		
Process Fugitive Areas		
1470FUGS	Tank 1470 Fugitives	VOC, Benzene, Toluene
21644FUGS	Tank 21644 Fugitives	VOC, Benzene, Toluene
Tanks		
AUT1470	Tank 1470	VOC, Benzene, Toluene
AUT21644	Tank 21644	VOC, Benzene, Toluene
Port Arthur Terminal (PAT)		

Emission Sources - Maximum Allowable Emission Rates

Process Fugitive Areas		
PATFUGS	Port Arthur Terminal Fugitives	VOC, Benzene, Toluene
Tanks		
AUT1622	Tank 1622	VOC, Benzene, Toluene
Port Neches Terminal (PNT)		
Process Fugitive Areas		
PNTFUGS	Port Neches Terminal Fugitives	VOC, Benzene, Toluene
Tanks		
LOUT5561	Tank 5561	VOC, Benzene, Toluene
TT1815	Tank 1815	VOC, Benzene, Toluene

Emission Sources - Maximum Allowable Emission Rates

EMISSION CAPS				
			Emission Rates	
		Air Contaminant Name (3)	**lbs/hour**	**TPY (4)**
		CO	432	1001
		NO_x	355	881
		PM_{10}	34	97
		SO_2	203	216
		VOC	273.97	516.47
		Benzene	20.86	51.48
		Toluene	17.07	17.18
Individual Emission Limits				
LOUT34030	Tank 34030	VOC	10.52	14.74
		Benzene	1.14	2.52
		Toluene	0.52	1.10
MSS Emission Limits				
MSSLOUFLARE	LOU FLARE	VOC (7)	585.90	49.20
		VOC (8)	3012.99	4.94
		Benzene (9)	299.30	2.24
		NO_x (7)	58.83	5.27
		NO_x (8)	1251.90	7.16
		CO (7)	117.45	36.04
		CO (8)	2499.26	14.30

Emission Sources - Maximum Allowable Emission Rates

			Emission Rates	
		Air Contaminant Name (3)	**lbs/hour**	**TPY (4)**
MSSAUSFLARE	AU FLARE	VOC (7)	414.74	0.92
		VOC (8)	0.01	0.01
		Benzene (9)	109.14	0.31
		NO_x (7)	75.69	0.11
		NO_x (8)	26.52	0.08
		CO (7)	151.10	0.22
		CO (8)	52.95	0.16
MSSRTO	Thermal Oxidizer	VOC	0.73	0.07
		Benzene	0.73	0.07
		NO_x	2.22	0.27
		CO	1.48	0.18
		PM	0.02	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
		SO_2	0.03	0.01
MSSFUG	Fugitive Emissions	VOC	77.75	4.14
		Benzene	0.90	0.08
		NO_x	45.19	6.31
		CO	83.09	7.26
		PM	90.34	1.14
		PM_{10}	81.34	1.10
		$PM_{2.5}$	81.34	1.10
		SO_2	2.77	0.42

Emission Sources - Maximum Allowable Emission Rates

(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) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
NO_x - total oxides of nitrogen
SO_2 - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$ as represented
PM_{10} - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
$PM_{2.5}$ - total particulate matter equal to or less than 2.5 microns in diameter
CO - carbon monoxide
(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
(5) Ancillary sources listed in the Emissions Cap Compliance Plan dated May 15, 2002 as being authorized by Permits by Rule (30 TAC Chapter 106) and consolidated into this permit.
(6) Emission rate is an estimate and compliance is demonstrated by meeting the requirements of the applicable special conditions and permit application representations.
(7) Planned Maintenance, Startup, and Shutdown (MSS) Emissions as described in the permit special condition numbers 36 through 52 and Attachments A, B, and C.
(8) LOU Startup emissions may occur for 73 hours annually
(9) Total VOC allowables include benzene.

Date: _____