

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 18963 and PSD-TX-762M3

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 *	Source	Air Contaminant	Emission Rates	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
**				
02ACU2H201	Heater Crude Unit H-201	CO (5)	9.52	24.24
		NO _x	22.20	43.51
		PM ₁₀ (5)	1.37	2.82
		SO ₂	5.87	6.07
		VOC	0.77	1.58
22TANK0441	Tank No. 441	VOC	1.53	0.65
22TANK0531	Tank No. 531	VOC	0.84	2.21
22TANK0536	Tank No. 536	VOC	6.53	0.43
22TANK0558	Tank No. 558	VOC	0.88	1.22
22TANK0559	Tank No. 559	VOC	0.92	0.43
22TANK0560	Tank No. 560	VOC	0.92	0.60
22TANK0561	Tank No. 561	VOC	0.92	0.59
22TANK0562	Tank No. 562	VOC	0.34	4.22
22TANK0563	Tank No. 563	VOC	1.29	4.22
22TANK0587	Tank No. 587	VOC	7.98	7.37
22TANK0902	Tank No. 902	VOC	10.01	3.03

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission *	Source	Air Contaminant	<u>Emission Rates</u>	
<u>Point No. (1)</u>	<u>Name (2)</u>	<u>Name (3)</u>	<u>lb/hr</u>	<u>TPY</u>
**				
22TANK0589	Tank No. 589	VOC	1.18	
22TANK0925	Tank No. 925	VOC	1.20	
	Annual Emission Cap for Tanks 589 and 925	VOC		0.39
45DOCK2PCV	Dock 2	VOC	13.82	0.47
55RGNFLUGS	Regenerator Flue Gas Post 2000 Project (8)	CO (5)	144.00	357.85
		NH ₃	3.98	17.48
		NO _x	110.84	235.14
		PM/PM ₁₀ (5) (6)	41.23	145.34
	SO _x	108.59	83.76	
		VOC	7.53	20.07
	Regenerator Flue Gas Post 2006 Project (9)	CO	143.69	180.34
		NH ₃	3.92	15.50
		NO _x	82.42	235.13
		PM/PM ₁₀ (7) (6)	52.96	186.66
	SO _x	81.91	106.52	
		VOC	5.63	18.06
55FCCUHOP	Catalyst Transport	PM (5)	0.02	0.10
58GSHDSCTR	FCC Naphtha HDS Cooling Tower	VOC	0.13	0.55
67FPMCLTWR	FPM Cooling Tower	VOC	7.56	33.12
55FCCUFUG	Process Area Fugitives (4) 0.22	H ₂ S		0.05
		PM (5)	0.41	1.80
		VOC	10.59	46.38

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

550FFGSFUG	FCCU Offgas Process Fugitives (4)	VOC	0.67	3.00
58GSHDSFUG	FCC Naphtha HDS Unit Process Fugitives (4)	H ₂ S	0.02	0.06
		VOC	2.85	12.46

- (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
 NO_x - total oxides of nitrogen
 PM - particulate matter, suspended in the atmosphere, including PM₁₀
 PM₁₀ - 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.

 SO₂ - sulfur dioxide
 VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
 NH₃ - ammonia
 SO_x - sulfur oxides
 H₂S - hydrogen sulfide
- (4) Emission rate is an estimate and compliance is demonstrated by meeting the requirements of the applicable special conditions and permit application representations.
- (5) PSD-TX-762M2 emissions.
- (6) This includes front-half and back-half PM/PM₁₀ using the U.S. Environmental Protection Agency Reference Method 5 and equivalent methods.
- (7) PSD-TX-762M3 emissions.
- (8) Premodification emission rates.
- (9) Post modification emission rates.

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

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

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

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

Dated May 19, 2008