EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 18936 and PSDTX762M3

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	Emission Rates*	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**	
02ACU2H201	Heater Crude Unit H-201	CO (5) NO _x PM ₁₀ (5) SO ₂ VOC	9.52 22.20 1.37 5.87 0.77	24.24 43.51 2.82 6.07 1.58	
22TANK0531	Tank No. 531	VOC	0.84	2.21	
22TANK0536	Tank No. 536	VOC	6.53	0.43	
22TANK0562	Tank No. 562	VOC	0.34	4.22	
22TANK0563	Tank No. 563	VOC	1.29	4.22	
45DOCK2PCV	Dock 2	VOC	13.82	0.47	
55RGNFLUGS	Regenerator Flue Gas Post 2000 Project (8)	CO (5) NH_3 NO_x PM/PM_{10} (6) (5) SO_x VOC	144.00 3.98 110.84 41.23 108.59 7.53	357.85 17.48 235.14 145.34 83.76 20.07	
	Regenerator Flue Gas Post 2006 Project (9)	CO NH_3 NO_x PM/PM_{10} (6) (7) SO_x VOC	143.69 3.92 82.42 52.96 81.91 5.63	180.34 15.50 235.13 186.66 106.52 18.06	
55FCCUHOP	Catalyst Transport	PM (5)	0.02	0.10	

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS

DATA

Emission	Source	Air Contaminant	Emission R	Emission Rates*	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**	
55OGTCLTWR	OGT Cooling Tower (4)	VOC	0.13	0.55	
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)	H₂S PM (5) VOC	0.05 0.41 10.59	0.22 1.80 46.38	
55OFFGSFUG	FCCU Offgas Process Fugitives (4)	VOC	0.67	3.00	
58GSHDSFUG	FCC Naphtha HDS Unit Process Fugitives (4)	H₂S VOC	0.02 2.85	0.06 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) PSDTX762M2 emissions.

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EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

- (6) This includes front-half and back-half PM/PM₁₀ using the U.S. Environmental Protection Agency Reference Method 5 and equivalent methods.
- (7) PSDTX762M3 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:
 - <u>24</u> Hrs/day <u>7</u> Days/week <u>52</u> Weeks/year
- ** Compliance with annual emission limits is based on a rolling 12-month period.

Dated November 17, 2009