EMISSION SOURCES – MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 4802/PSDTX1260

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)	Emission Rates	
			lbs/hour	TPY (4)
104	Regeneration Unit No. 2 Stack (8)	Cl_2 CO H_2SO_4 (10) HCl NO_x PM PM_{10} $PM_{2.5}$ SO_2 VOC	5.70 0.84 6.06 0.28 37.20 4.01 4.01 4.01 1250.00 0.01	25.00 0.18 22.67 1.23 162.90 12.47 12.47 12.47 5475.00 0.01
104	Regeneration Unit No. 2 Stack (9)	Cl_2 CO H_2SO_4 (10) HCl NO_x PM PM_{10} $PM_{2.5}$ SO_2 VOC	5.70 0.01 7.19 0.16 37.20 4.01 4.01 4.01 143.75 0.01	25.00 0.05 20.99 0.70 61.95 12.47 12.47 12.47 377.78 0.01
120	Vapor Combustor Standby Operation for Backup	CO NO_x PM_{10} SO_2 VOC	1.51 1.80 0.14 0.01 0.10	3.33 3.96 0.30 0.02 0.22
120	Vapor Combustor (6) (Startup, Shutdown, and Maintenance 1,314 hours per rolling 12-months)	Cl_2 CO HCl NO_x PM_{10} SO_2 VOC	0.14 0.40 0.06 0.48 0.04 0.01 22.22	0.09 0.27 0.04 0.32 0.02 0.01 3.41
128	Regenerator No. 2 Preheater (1,000 hours per rolling 12-	CO NO_x	2.07 2.46	1.03 1.23

Emission Sources – Maximum Allowable Emission Rates

	months)	PM_{10} SO_2 VOC	0.19 0.02 0.14	0.10 0.01 0.07
170	Vapor Combustor 2 Normal Operation	CO NO_x SO_2 VOC	4.28 2.15 0.01 0.08	0.30 0.15 0.01 0.01
170	Vapor Combustor 2 (6) (Furnace Startup, Shutdown, and Maintenance 1,314 hours per rolling 12-months)	Cl_2 CO HCl NO_x SO_2 VOC	0.40 15.30 2.07 1.78 2.02 12.90	0.03 4.85 0.13 0.57 0.13 0.86
170	Vapor Combustor 2 (6) (Storage Tanks 48, 49, 53 and 56 Planned Inspection Purge Control Option One)	CO NO_x SO_2 VOC	10.81 1.26 0.02 0.05	1.48 0.17 0.01 0.01
CATSCNR2	Catalyst Screening for Regeneration Unit No. 2 Converter (6)	PM PM_{10} $PM_{2.5}$	0.01 0.01 0.01	0.01 0.01 0.01
MSS-HAZTK1	Hazardous Waste Tanks (F2, F3) and T554, Planned MSS Purge (6)	VOC	0.02	0.01
MSS-HAZTK2	Hazardous Waste Tanks (B1, B2, H1 and H2) Planned MSS Purge (6)	VOC	0.01	0.01
TKINSPMSS1	Tank 78 Planned Inspection Purge (6)	CO C_2H_4 NO_x SO_2 VOC (7)	3.04 0.01 1.12 0.08 0.05	0.75 0.01 0.35 0.09 0.06
TKINSPMSS2	Tanks 48, 49, 53 and 56 Planned Inspection Purge (6)	CO C_2H_4 NO_x SO_2 VOC (7)	3.04 0.01 1.12 0.08 0.05	0.40 0.01 0.19 0.01 0.01
FE2	Process Fugitives (5)	SO_2	0.05	0.20
FE3	Process Fugitives (5)	SO_2	0.01	0.03
FE-12	Fugitives from HW Equipment (5)	VOC	0.04	0.19
FE-13	Fugitives from HW Equipment (5)	VOC	0.02	0.10

Emission Sources – Maximum Allowable Emission Rates

FE-14	Fugitives from HW Equipment (5)	VOC	0.01	0.01
FUG-SA1	Spent Acid Process Fugitives (5)	H_2SO_4 SO_2 VOC	0.41 0.12 0.09	1.79 0.37 0.35
FUG-SA2	Spent Acid Process Fugitives (5)	H_2SO_4 SO_2 VOC	0.07 0.03 0.02	0.31 0.08 0.07
FUG-SA3	Spent Acid Process Fugitives (5)	H_2SO_4 SO_2 VOC	0.03 0.06 0.03	0.11 0.18 0.08
FUG-SA4	Spent Acid Process Fugitives (5)	H_2SO_4 SO_2 VOC	0.30 0.13 0.08	1.34 0.38 0.30

(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) C_2H_4 - ethylene
CO - carbon monoxide
Cl_2 - chlorine
H_2SO_4 - sulfuric acid
HCl - hydrogen chloride
NO_x - total oxides of nitrogen
PM - particulate matter greater than 10 microns in diameter
PM_{10} - particulate matter (PM) equal to or less than 10 microns in diameter.
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
SO_2 - sulfur dioxide
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
(5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
(6) Planned startup, shutdown, and maintenance emissions
(7) Ethylene emissions are not included in the VOC emission total.
(8) Pre emission control
(9) Post emission control effective on and after April 1, 2014
(10) PSDTX1260 pollutant

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

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

Emission Sources – Maximum Allowable Emission Rates

Date: _____