EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 5452

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 A	ir Contaminant	Emission Rates *		
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**	
F-A1	Furnace A-West Stack	NO_x	12.24	53.61	
		CO	3.67	16.08	
		PM_{10}	0.33	1.46	
		VOC	0.24	1.05	
		SO ₂	0.03	0.11	
F-A2	Furnace A-Center Stack	NO_x	12.24	53.61	
		CO	3.67	16.08	
		PM_{10}	0.33	1.46	
		VOC	0.24	1.05	
		SO ₂	0.03	0.11	
F-A3	Furnace A- East Stack	NO _x	12.24	53.61	
		CO	3.67	16.08	
		PM_{10}	0.33	1.46	
		VOC	0.24	1.05	
		SO ₂	0.03	0.11	
F-B	Furnace B Stack	NO _x	41.92	183.62	
		CO	12.58	55.09	
		PM_{10}	0.77	3.37	
		VOC	0.22	0.95	
		SO ₂	0.09	0.41	
F-CD	Hydrotreater Oil and Feed Heat	er NO _x	4.59	20.10	
	Stack (EPN F-CD) is a	CO	7.29	31.93	
	Combined Stack for Heater F-0	C PM ₁₀	1.05	4.59	
	(97 MMBtu/hr) and	VOC	0.76	3.32	
	Heater F-D (38 MMBtu/hr)	SO ₂	0.08	0.36	
GLY-1	Glycol Unit Regen Stack	VOC	1.92	8.50	
B-08	No. 8 Boiler Stack	NO _x	12.30	53.87	

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission	Source	Air Contaminant	Emission	Emission Rates *		
Point No. (1) Name (2)		Name (3)	lb/hr	TPY**		
		СО	18.64	81.63		
		PM_{10}	1.59	6.96		
		VOC	1.15	5.04		
		SO_2	0.12	0.53		
FUG-FRAC	Frac. Plant Fugitives (4)	VOC	34.95	153.10		
FUG-IMP	Imports Unit Fugitives (4)	VOC	8.06	35.34		
FUG-HYDRO	Hydrotreater Unit Fugitives (4	P) VOC H₂S	1.59 0.01	6.95 0.01		

- (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 area name or fugitive source name.
- (3) NO_x total oxides of nitrogen
 - CO carbon monoxide
 - PM₁₀ particulate matter (PM) 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.
 - VOC volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
 - SO₂ sulfur dioxide
 - H₂S hydrogen sulfide
- (4) Emissions are an estimate based on component count, factors, and applicable reduction credits for a leak detection and repair program.

*	Emission rates schedule:	are ba	ased on	and the	e facilities	are	limited	by	the	following	maximum	operating
	Hrs/day _	D	Days/wee	ek	_Weeks/y	ear (or <u>8,760</u>	<u>)</u>	lrs/y	ear		

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