

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 80799

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)
66FL1 66FL2 66FL3 66FL12	Controlled Vessel Degassing	CO	44.42	5.31
		H <sub>2</sub> S	2.32	0.22
		NO <sub>x</sub>	8.62	1.03
		SO <sub>2</sub>	214.40	38.32
		VOC	84.42	9.77
MSS-VAC MSS-AIRMOVERS MSS-BLAST MSS-FRAC MSS-VES MSS-MAINTACT MSS-EQP MSS-DRAING	Atmospheric MSS	H <sub>2</sub> S	0.43	0.03
		VOC	264.02	40.71
		PM	0.23	0.86
		PM <sub>10</sub>	0.03	0.10
		PM <sub>2.5</sub>	0.03	0.10
MSS-CHEM	Chemicals and Cleaners for MSS	VOC	10.25	10.66
MISC-MSS	Miscellaneous MSS Activities (Low Emitting Activities)	VOC	16.83	1.48
		CO	0.15	0.03
		NO <sub>x</sub>	0.15	0.03
		SO <sub>2</sub>	0.15	0.03

## Emission Sources - Maximum Allowable Emission Rates

MSS-TANKS	Tank MSS (5)	VOC	788.06	10.44
		NO <sub>x</sub>	6.52	0.98
		CO	17.96	2.69
		PM	0.50	0.02
		PM <sub>10</sub>	0.50	0.02
		PM <sub>2.5</sub>	0.50	0.02
		H <sub>2</sub> S	0.49	<0.01
		SO <sub>2</sub>	9.73	0.09
Heaters/Furnaces	Decoking (5)	CO	3.89	6.02
		PM	1.67	2.58
		SO <sub>2</sub>	5.56	8.60
34I1 43I1	SRU Startup and Meltout	H <sub>2</sub> S	0.05	0.01
		SO <sub>2</sub>	94.00	6.77
66FL12 66FL13 43I1	GOHDS Units Startup and Shutdown	CO	2,603.00	62.46
		H <sub>2</sub> S	60.00	1.44
		NO <sub>x</sub>	1,700.00	40.80
		SO <sub>2</sub>	5,534.00	132.80
		VOC	0.96	0.02
		PM	0.01	0.01

Emission Sources - Maximum Allowable Emission Rates

66FL1 66FL2 66FL3 66FL12	Hydrogen, Off Gas, and Flare Gas Recovery Flaring	CO	105.00	2.24
		H <sub>2</sub> S	69.54	0.11
		NO <sub>x</sub>	57.45	1.20
		SO <sub>2</sub>	6,414.00	9.68
		VOC	1,675.00	3.39
MSS-U41	Unit 41 Hydrogen Plant and PSA Startup Venting	CO	2090.08	58.51
		VOC	16.20	0.45
29P1	Unit 29 FCCU Regenerator MSS	CO	6775.54	15.81
		PM	4874.50	123.05
		PM <sub>10</sub>	633.68	16.00
		PM <sub>2.5</sub>	97.49	2.46
40P1	Unit 40 FCCU Regenerator MSS	CO	5928.60	13.83
		PM	3476.18	87.75
		PM <sub>10</sub>	451.90	11.41
		PM <sub>2.5</sub>	69.52	1.76

- (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 an area name or fugitive source name.
- (3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code §101.1  
NO<sub>x</sub> - total oxides of nitrogen  
SO<sub>2</sub> - sulfur dioxide  
CO - carbon monoxide  
H<sub>2</sub>S - hydrogen sulfide  
PM - particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>  
PM<sub>10</sub> - particulate matter equal to or less than 10 microns in diameter  
PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Emissions may occur at any tank or heater/furnace.

Date: October 1, 2020