

Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 133027 and N220

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 (4)	TPY (5)
1	Steam Methane Reformer	NO _x	43.44	33.10
		NO _x (MSS)	106.18	-
		CO	6.58	25.56
		CO (MSS)	45.20	-
		VOC	2.24	8.27
		VOC (MSS)	2.96	-
		PM ₁₀	9.82	35.97
		PM _{2.5}	9.82	35.97
		SO ₂	7.45	4.92
		SO ₂ (MSS)	9.07	-
		NH ₃	4.89	17.84
		HAPS	0.83	3.03
2	Warm Flare	NO _x	3.96	6.98
		NO _x (MSS)	118.74	-
		CO	12.42	21.22
		CO (MSS)	148.33	-
		VOC	0.01	0.05
		VOC (MSS)	0.02	-
		SO ₂	<0.01	<0.01
3	Cold Flare	NO _x	0.02	0.14
		NO _x (MSS)	5.40	-
		CO	0.13	1.21
		CO (MSS)	46.28	-
		VOC	0.01	0.05
		SO ₂	<0.01	<0.01

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4	Cooling Tower	PM	1.96	8.59
		PM ₁₀	1.48	6.47
		PM _{2.5}	0.60	2.65
5	MDEA Unit CO ₂ Vent	CO	5.31	19.39
		VOC	0.36	1.32
		NH ₃	0.05	0.17
6	Routine Boiler Blowdown	VOC	1.26	2.75
		CH ₃ OH	1.10	2.41
		NH ₃	0.49	1.07
7-MSS	Process Waste Water	CO	10.16	0.37
		VOC	2.67	0.10
		CH ₃ OH	2.18	0.08
		NH ₃	0.19	<0.01
SMR-FUG	SMR Plant Fugitives (6)	CO	0.50	2.20
		VOC	0.07	0.30
		NH ₃	0.24	1.06
CO-FUG	CO Production Equipment Fugitives (6)	CO	2.30	10.09
		VOC	0.94	4.10

- (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) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
 NO_x - total oxides of nitrogen
 SO₂ - sulfur dioxide
 PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented
 PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}, as represented
 PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter
 CO - carbon monoxide
 CH₃OH - methanol
 HAP - hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C
- (4) Planned maintenance, startup, and shutdown (MSS) lbs/hour emissions for all pollutants are authorized even if not specifically identified as MSS. During any clock hour that includes one or more minutes of planned MSS, that pollutant's maximum hourly emission rate shall apply during that clock hour.
- (5) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period. Annual emission rates for each source include planned MSS emissions.

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- (6) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

Date: October 26, 2018