

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 2466

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)
E10C021	Steam Superheater	VOC	0.05	0.22
		NO <sub>x</sub>	1.49	6.53
		SO <sub>2</sub>	< 0.01	< 0.01
		PM	0.08	0.36
		PM <sub>10</sub>	0.08	0.36
		PM <sub>2.5</sub>	0.08	0.36
		CO	0.02	0.09
E10N002	Catalytic Incinerator	VOC	0.01	0.03
		NO <sub>x</sub>	0.19	0.85
		SO <sub>2</sub>	< 0.01	< 0.01
		PM	0.01	0.04
		PM <sub>10</sub>	0.01	0.04
		PM <sub>2.5</sub>	0.01	0.04
		CO	4.23	18.52
E10C062	Start-up Flare A	VOC	< 0.01	0.01
		NO <sub>x</sub>	1.70	0.13
		CO	21.21	0.77
		SO <sub>2</sub>	< 0.01	0.01
E10C063	Start-up Flare B	VOC	< 0.01	0.01
		NO <sub>x</sub>	1.70	0.13
		CO	21.21	0.77
		SO <sub>2</sub>	< 0.01	< 0.01
F10C001	Syn Gas Fugitives (5)	VOC	0.61	2.57

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		CO	16.28	63.95
F10N001-01	Catalytic Incinerators Fugitives (5)	CO	0.01	0.05
F10C005	MEA System Fugitives (5)	VOC	2.28	9.99
E10C060	Syn Gas Flare - Flared Process Emission (Flash Gas) (6) (8)	VOC	< 0.01	< 0.01
		NO <sub>x</sub>	1.47	3.33
		CO	7.48	16.97
		SO <sub>2</sub>	< 0.01	< 0.01
	Syn Gas Flare - Flared Start-up Emission (8)	VOC	< 0.01	< 0.01
		NO <sub>x</sub>	16.72	0.28
		CO	210.78	2.65
		SO <sub>2</sub>	< 0.01	< 0.01
	Maintenance Emissions (including K-Gas & PSA Compressors) (8)	VOC	< 0.01	< 0.01
		NO <sub>x</sub>	10.50	3.60
		CO	153.75	41.72
		SO <sub>2</sub>	< 0.01	< 0.01
SGMSS	Syn Gas MSS Emissions	CO	2.33	0.04
SGUMSS	CO <sub>2</sub> Stills MSS Emissions	CO	1.86	0.01
		VOC	0.08	0.01
E09A032	CO <sub>2</sub> Stills MSS Emissions to Site Flare (7) (9)	NO <sub>x</sub>	0.21	0.01
		CO	15.66	0.03

- (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<sub>x</sub> - total oxides of nitrogen
- SO<sub>2</sub> - sulfur dioxide
- PM - total particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>, as represented
- PM<sub>10</sub> - total particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>, as represented
- PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter
- CO - carbon monoxide
- (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) The emissions are based on the contributions from the Syn Gas Unit to the Syn Gas Flare.

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- (7) The emissions are based on the contributions from the CO<sub>2</sub> Stills Unit MSS activities to the Site Flare.
- (8) Additional emissions from EPN E10C060 are authorized in Permit Nos. 9085, 49023, 4884, and 9085
- (9) Additional emissions from EPN E09A032 are authorized in Permit Nos. 436, 3791, 9085, 49023, 4884, and 9085

Date: May 25, 2018