

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 5269A

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 Point No.(1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
003	MDEA Reboiler	VOC	0.05	0.20
		NO _x	0.85	3.72
		CO	0.71	3.13
		SO ₂	<0.01	0.02
		PM ₁₀ 0.06	0.28	
006	Dehydrator Flare (formerly SE 29625)	VOC	1.22	5.35
		NO _x	0.65	2.83
		CO	3.52	15.40
		SO ₂	0.31	1.36
		H ₂ S	<0.01	0.03
007	Amine and SRU Flare (4)	BTEX 0.66	2.89	
		VOC	0.13	0.55
		NO _x	0.62	2.69
		CO	3.35	14.70
		SO ₂	0.31	1.36
008	Preheater (SRU)	H ₂ S	<0.01	0.03
		VOC	0.01	0.03
		NO _x	0.11	0.48
		CO	0.09	0.40
		SO ₂	<0.01	<0.01
009	Reheater (SRU)	PM ₁₀	<0.01	0.04
		VOC	<0.01	0.01
		NO _x	0.05	0.22
		CO	0.04	0.18
		SO ₂	<0.01	<0.01
		PM ₁₀	<0.01	0.02

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
010	Reheater	VOC	<0.01	0.01
		NO _x	0.05	0.22
		CO	0.04	0.18
		SO ₂	<0.01	<0.01
		PM ₁₀	<0.01	0.02
012	Condensate Flare	VOC	0.04	0.20
		Benzene	<0.01	<0.01
		NO _x	<0.01	0.43
		CO	0.53	2.32
		SO ₂	0.31	1.38
		H ₂ S	<0.01	0.03
013	Sulfur Recovery Unit Flare (4)	VOC	0.03	0.12
		NO _x	0.13	0.56
		CO	0.69	3.04
		SO ₂	0.92	4.04
		H ₂ S	0.02	0.08
015	Dehydrator Reboiler	VOC	0.01	0.05
		NO _x	0.20	0.88
		CO	0.17	0.74
		SO ₂	<0.01	0.01
		PM ₁₀	0.02	0.07
017	Auxiliary Boiler	VOC	0.01	0.05
		NO _x	0.22	0.96
		CO	0.18	0.81
		SO ₂	<0.01	0.01
		PM ₁₀	0.02	0.07
018	Reheater (SRU)	VOC	<0.01	0.01
		NO _x	0.05	0.22
		CO	0.04	0.18
		SO ₂	<0.01	<0.01
		PM ₁₀	<0.01	0.02

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			lb/hr	TPY
019	Tail Gas Incinerator (5)	VOC	0.01	0.10
		NO _x	0.42	1.84
		CO	0.08	0.37
		SO ₂	142.70	622.00
		H ₂ S	0.30	1.31
		PM ₁₀	<0.01	0.01
019 (cont.)	Tail Gas Incinerator (6)	VOC	0.01	0.10
		NO _x	0.42	1.84
		CO	0.08	0.37
		SO ₂	170.70	39.99
		H ₂ S	0.68	2.99
		PM ₁₀	0.01	0.04
020	Sulfur Pit Vent	H ₂ S	<0.01	0.02
024	Solar Saturn Compressor	VOC	0.02	0.11
		NO _x	3.48	15.20
		CO	2.99	13.10
		SO ₂	0.01	0.02
		PM ₁₀	0.24	1.05
025	Solar Saturn Compressor	VOC	0.02	0.11
		NO _x	3.48	15.20
		CO	4.69	20.54
		SO ₂	0.01	0.02
		PM ₁₀	0.24	1.05
026	Starter Vent (7)	VOC	0.46	0.01
027	Solar Saturn Compressor	VOC	0.02	0.11
		NO _x	3.48	15.20
		CO	1.87	8.19
		SO ₂	0.01	0.02
		PM ₁₀	0.24	1.05

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
028	Solar Saturn Compressor (formerly SE 31462)	VOC	0.02	0.11
		NO _x	3.48	15.20
		CO	2.64	11.56
		SO ₂	0.01	0.02
		PM ₁₀	0.24	1.05
030	Sulfur Truck Loading	H ₂ S	<0.03	<0.01
		PM	0.29	0.05
FG-1	Fugitives (8)	VOC	1.13	4.95
		Benzene	0.01	0.04
		H ₂ S 1.97	8.62	

- (1) Emission point identification (EPN) - 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) PM - particulate matter, suspended in the atmosphere, including PM₁₀.
 PM₁₀ - particulate matter equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no particulate matter greater than 10 microns is emitted.
 VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1 (30 TAC § 101.1)
 NO_x - total oxides of nitrogen
 SO₂ - sulfur dioxide
 CO - carbon monoxide
 H₂S - hydrogen sulfide
 BTEX - benzene, toluene, ethylene, and xylene
- (4) Flare is also for emergency flaring during maintenance or process upset as represented in permit application. Under no circumstances shall the Amine and SRU Flare (EPN 013) and Tail Gas Incinerator (TGI) (EPN 019) operate simultaneously except during periods when the acid gas stream is in transition from the TGI to the flare or vice versa. This permit does not exempt reporting or recordkeeping requirements under 30 TAC §§ 101.6 and 101.7, relating to start-up, shutdown, maintenance, and upset conditions.
- (5) Emission rates when Sulfur Recovery Plant is operating.
- (6) Emission rates when Sulfur Recovery Plant is not operating due to H₂S feed rate, as monitored

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at plant, of less than 2 long tons per day of H₂S.

- (7) Emission rates are an estimate only based on an average of 40 seconds per start with an estimated 52 starts per year and should not be considered a maximum allowable emission rate. (Starter vents approximately 6.6 lb/hr sweet natural gas that is approximately 7 percent by weight VOC.)

- (8) Fugitive emissions are an estimate only and should not be considered as a maximum allowable rate.

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

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

_____Hrs/day, ___Days/week, ___Weeks/year or 8,760 Hrs/year

Dated _____