

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 20418 and PSD-TX-787M2

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	Air Contaminant	<u>Emission Rates</u>	
Point No. (1)	Name (2) TPY**	Name (3)	<u>lb/hr</u>	
EP-1	CM-1 Reciprocating Engine	NO _x	8.27	36.21
		CO	8.82	38.62
		VOC	1.10	4.83
		SO ₂	0.01	0.05
		PM	0.18	0.78
EP-2	CM-2 Reciprocating Engine	NO _x	8.27	36.21
		CO	8.82	38.62
		VOC	1.10	4.83
		SO ₂	0.01	0.05
		PM	0.18	0.78
EP-3	CM-3 Reciprocating Engine	NO _x	8.27	36.21
		CO	8.82	38.62
		VOC	1.10	4.83
		SO ₂	0.01	0.05
		PM	0.18	0.78
EP-4	CM-4 Reciprocating Engine	NO _x	8.27	36.21
		CO	8.82	38.62
		VOC	1.10	4.83
		SO ₂	0.01	0.05
		PM	0.18	0.78
EP-5	CM-5 Reciprocating Engine	NO _x	8.27	36.21
		CO	8.82	38.62
		VOC	1.10	4.83

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SO ₂	0.01	0.05
PM	0.18	0.78

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
EP-6	CM-6 Reciprocating Engine	NO _x	4.46	19.55
		CO	8.93	39.11
		VOC	0.60	2.61
		SO ₂	0.01	0.03
		PM	0.10	0.44
EP-7	CM-7 Reciprocating Engine	NO _x	4.46	19.55
		CO	8.93	39.11
		VOC	0.60	2.61
		SO ₂	0.01	0.03
		PM	0.10	0.44
EP-8	CM-8 Reciprocating Engine	NO _x	4.46	19.55
		CO	8.93	39.11
		VOC	0.60	2.61
		SO ₂	0.01	0.03
		PM	0.10	0.44
EP-9	Heater	NO _x	1.56	6.83
		CO	1.04	4.56
		VOC	0.13	0.57
		SO ₂	0.03	0.11
		PM	0.29	1.25
EP-10	Flare	NO _x	1.12	0.19
		CO	9.59	1.61
		VOC	0.04	0.01
		SO ₂	2,555.87	202.00
		H ₂ S	27.14	2.19
EP-11	SRU Incinerator	NO _x	0.43	1.88
		CO	2.50	10.95

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VOC	0.01	0.01
SO ₂	38.50	168.63
H ₂ S	0.04	0.18
CS ₂	0.01	0.05
COS	0.01	0.01

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Emission *	Source	Air Contaminant	<u>Emission Rates</u>	
Point No. (1)	Name (2) TPY**	Name (3)	<u>lb/hr</u>	
EP-11	SRU Incinerator(5)	NO _x	0.43	0.04
		CO 2.50	0.22	
		VOC	0.01	0.01
		SO ₂	72.40	6.35
		H ₂ S	0.04	0.01
		CS ₂	0.01	0.01
		COS	0.01	0.01
EP-12	Tank Truck Loading	VOC	1.01	0.01
EP-13	Auxiliary Boiler	NO _x	0.27	1.19
		CO	0.23	1.00
		VOC	0.02	0.07
		SO ₂	0.01	0.01
		PM	0.02	0.09
EP-14	Emergency Diesel Generator	NO _x	8.86	0.89
		CO	0.72	0.07
		VOC	0.23	0.02
		SO ₂	0.81	0.08
		PM	0.89	0.10
WT-2	Amine Wastewater Tank	VOC	0.21	0.01
WT-3	Slop Oil Tank	VOC	0.10	0.01
WT-4	MDEA Wastewater Tank	VOC	0.24	0.01
FUG	Fugitive (4)	VOC	3.81	16.68
		H ₂ S	0.02	0.07

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A001	Fugitives, West Panhandle	VOC	0.09
	0.38		
	Separator Porus Media H ₂ S	0.01	0.01
	Filter (7/29/1993)(6)		

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Emission *	Source	Air Contaminant	<u>Emission Rates</u>	
Point No. (1)	Name (2)	Name (3)	<u>lb/hr</u>	
	TPY**			
A001	Fugitives, MDEA Flash Tank	VOC	0.01	0.03
	(11/14/1994)(6)	H ₂ S	0.01	0.02
A001	Fugitives, 213 Aerial Cooler	VOC	0.02	
	0.08			
	(3/24/1995)(6)			
A001	Fugitives, Propane Aerial Cooler	VOC	0.01	0.05
	(3/29/1995)(6)			
A001	Fugitives, Anadarko Gas Processing	VOC	0.02	0.10
	(5/1/1997)(6)			
A001	Fugitives, NGL Contactor	VOC	0.01	0.01
	(8/11/1999)(6)			
EP-11	NGL Contactor	SO ₂	2.15	9.40
	(8/11/1999)(6)			
A001	Fugitives, NGL Pump Replacement	VOC	0.02	0.09
	(8/1/2002)(6)			
EP-10	Flare (dehy still, eductor and MSS; 6/17/2002; PBR No. 51610)(6)	VOC	501.64	22.23
		SO ₂	1,154.51	24.89
		NO _x	250.01	17.45

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		CO	499.11	34.83
		H ₂ S	12.53	0.27
FUG	Fugitives, Flare (dehy, still, eductor and MSS; 6/17/2002; PBR No. 51610)(6)	VOC	0.08	0.36
AFT-1	Antifoulant Tank (4/8/2002)(6)	VOC	0.01	0.01
DT-1	Diesel Tank (12/3/2002)(6)	VOC	0.01	0.01
PW-1	Parts Washer (11/14/2002)(6) 0.01	VOC		0.01

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
LOT-1	Lube Oil Tank (12/3/2002)(6)	VOC	0.01	0.01
LOT-1	Lube Oil Tank (12/3/2002)(6) 0.01		VOC	0.01
EGT-1	Antifreeze Tank (12/3/2002)(6) 0.01		VOC	0.01
MT-1	Methanol Tanks (12/3/2002)(6) 0.15		VOC	0.04
LAB001	Lab Vent (3/1/1992)(6)	VOC H ₂ S	0.01 0.02	0.01 0.07
EP-14	Emergency Diesel Generator(6)	NO _x CO VOC SO ₂ PM	8.86 0.72 0.23 0.81 0.89	2.99 0.24 0.08 0.27 0.29

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- (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 - particulate matter including particulate matter less than 10 microns in diameter
CO - carbon monoxide
H₂S - hydrogen sulfide
CS₂ - carbon disulfide
COS - carbonyl sulfide
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) Emission rates for SRU Incinerator for those times when the TGPU is down and the SRU continues to process acid gas (limited to 175 hours per year on 12-month rolling basis) as outlined in Special Condition No. 10.
- (6) EPN: EP 10 and EPN: FUG (Flare: dehy still, eductor, and MSS) are authorized under Permit by Rule Number 51610. EPN: EP-11 and EPN: FUG (NGL Contactor) are authorized under Permit by Rule Number 42106. EPN: A001 Fugitives from West Panhandle Filter Separator are authorized under Standard Exemption X23077. EPN: A001 MDEA Flash Tank and Fugitives are authorized under Standard Exemption X27053. EPN: A001 Fugitives from 213 Aerial Cooler are authorized under Standard Exemption X28862. EPN: A001 Fugitives from the Propane Aerial Cooler and Anadarko Gas Processing are authorized under a non registered Standard Exemption 66. EPN: PW-1 PartsWasher are authorized under a non registered Standard Exemption 34. EPN: A001 Fugitives from the NGL Pump Replacement are authorized under a non registered Permit by Rule § 106.352 claim. EPNs: AFT-1, DT-1, LOT-1, EGT-1, MT-1 Tanks are authorized under a non registered Permit by Rule § 106.352 claim. EPN: EP-14 (Emergency Diesel Generator, 876 hours/year) is authorized under a non-registered Permit by Rule § 106.511 claim. EPN: LAB001 is authorized under a non-registered Standard Exemption 34. The EPNs are not authorized by this

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permit. The EPNs are shown for reference only.

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

Hrs/day_____Days/week_____Weeks/year_____or Hrs/year 8,760

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

Dated August 16, 2007