## **Emission Sources - Certified Emission Rates**

## Registration Number 87096

This table lists the certified emission rates and all sources of air contaminants on the applicant's property covered by this registration. The emission rates shown are those derived from information submitted as part of the registration for PBR.

Air Contaminants Data

Project Number: 165486

## **Emission Sources - Certified Emission Rates**

CERTIFIED SITEWIDE EM	ISSIONS														
EPN / Emission Source	Status	VOC		NOx		СО		PM <sub>10</sub> /PM <sub>2.5</sub>		SO <sub>2</sub>		CH₂O*		Other HAPs**	
		lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy
Emission sources under Standard Exemption Standard Exemption 53 (effective 9/12/1989)															
TANK-1 / Condensate tank	existing, unchanged	5.56	24.34												
TANK-2 / Condensate tank	existing, unchanged	5.56	24.34												
LOAD / Loading	existing, unchanged	35.70	1.03												
Total SE 53 em	nissions (lbs/hr):	46.82													
Total SE 53 emissions (TPY):			49.71												
Emission Sources under PBR 106.352 (effective 6/4/2000) and 106.352(I) (effective 2/27/2011)															
REB-1 / 0.75 MMBtu/hr (60 MMSCF/day) glycol reboiler	existing, unchanged PBR 106.352	0.27	0.02	0.07	0.29	0.06	0.24	0.01	0.02	<0.01	<0.01	<0.01	<0.01	0.05	<0.01
SFI / SFI EVAC system (controls glycol dehydration unit)	existing, unchanged PBR 106.352	0.34	1.47	0.02	0.10	0.02	0.08	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
VOL / Miscellaneous tanks	existing, unchanged PBR 106.352	<0.01	0.01												
FUG / Fugitives	updated 106.352(I)	1.13	4.96												
MSS-BLDWN / Compressor engine blowdowns, up to 52 blowdowns per year and 1 hour per blowdown***	updated 106.352(I)	32.90	0.86											0.38	1.26
MSS-CATDN / Compressor engine catalyst downtime, up to 168 hours per year for ENG-1A, ENG-2A, and ENG-5***	updated 106.352(I)	8.11	0.68	11.87	1.00	29.45	2.47	0.28	0.02	0.02	<0.01	3.13	0.26		
MSS-FLRDN / Glycol dehydrator controls downtime***	existing, unchanged 106.352	31.18	2.62											20.81	1.75
Total PBR 106.352 em	nissions (lbs/hr):	73.93		11.96		29.53		0.29		0.02		3.13		21.24	
Total PBR 106.352 e	missions (TPY):		10.62		1.39		2.79		0.05		0.01		0.26		3.01
Emission Sources under PBR 106.512 (effective 6/13/2001)															
ENG-1A / 1,100 hp White- Superior 8GTLX825 engine with oxidation catalyst (Serial Number: 23979), limited to 8,592 hours per year	updated	1.45	6.14	3.63	15.61	1.45	6.25	0.08	0.35	0.01	0.03	0.22	0.94		
ENG-2A / 1,725 hp Caterpillar G3520B ULB engine with oxidation catalyst (Serial Number: TPC00113), limited to 8,592 hours per year	new	3.42	14.69	3.80	16.32	2.28	9.79	0.12	0.54	0.01	0.03	0.57	2.45		
ENG-3B / 1,232 hp Waukesha L7042 GSIU engine with AFRC and NSCR (Serial Number: 351687A)	updated	0.44	1.90	4.07	17.83	5.43	23.77	0.19	0.85	0.01	0.03	0.14	0.59		

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## **Emission Sources - Certified Emission Rates**

CERTIFIED EMISSIONS															
EPN / Emission Source Status		voc		NOx		СО		PM <sub>10</sub> /PM <sub>2.5</sub>		SO <sub>2</sub>		CH₂O*		Other HAPs**	
		lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy
ENG-4A / 1,232 hp Waukesha L7042 GSIU engine with AFRC and NSCR (Serial Number: 353498A)	updated	0.44	1.90	4.07	17.83	5.43	23.77	0.19	0.85	0.01	0.03	0.14	0.59		
ENG-5 / 1,340 hp Caterpillar G3516 TALE engine with AFRC and oxidation catalyst	existing, unchanged	1.75	7.52	5.91	25.39	1.77	7.60	0.10	0.43	0.01	0.03	0.27	1.16		
Total PBR 106.512 emissions (lbs/hr):		7.50		21.49		16.36		0.69		0.05		1.34			
Total PBR 106.512 emissions (TPY):			32.15		92.98		71.19		3.02		0.15		5.74		
TOTAL SITEWIDE EMISSIONS (lbs/hr):		128.25		33.45		45.89		0.98		0.07		4.47		21.24	
TOTAL SITEWIDE EMISSIONS (TPY):			92.48		94.37		73.98		3.07		0.16		6.00		3.01
MAXIMUM OPERATING SCHEDULE:		Hours/Day 2		24	Days/Week		7	Weeks/Year 52		2 Hours/Ye		'ear	8,760		

- \* Formaldehyde emissions are included in the VOC emissions.
- \*\* Other HAPs emissions that are also VOCs are included in VOC emissions.
- \*\*\* Planned MSS emissions are included in the certified emissions include glycol dehydrator controls downtime (EPN MSS-FLDRN); compressor engine blowdowns (MSS-BLDWN) based on 327 SCF/blowdown, 52 blowdowns per year, and a VOC content of 17.44%; and engine catalyst downtime (EPN MSS-CATDN) based on a downtime of up to 168 hours per year for ENG-1A, ENG-2A, and ENG-5. No other planned MSS emissions have been represented or reviewed.
- (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) Exempt Solvent Those carbon compounds or mixtures of carbon compounds used as solvents which have been excluded from the definition of volatile organic compound.

VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
 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

CH<sub>2</sub>O - formaldehyde

NO<sub>x</sub> - total oxides of nitrogen CO - carbon monoxide

 $PM_{10}$  - total particulate matter equal to or less than 10 microns in diameter, including  $PM_{2.5}$ , as

represented

PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter

SO<sub>2</sub> - sulfur dioxide H<sub>2</sub>S - hydrogen sulfide

- (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. Emission values should be used for federal applicability.

Effective	June 27, 2011
Date:	