

## Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 6289 and PSD-TX-76M8

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)
S-25	SO2 Storage Tank	SO <sub>2</sub>	0.09	0.38
BDS-5	Barge Dock Scrubber	VOC	1.03	0.71
FG-AN-III	Process Fugitives (5)	NH <sub>3</sub>	2.34	10.26
		VOC	11.06	48.39
		SO <sub>2</sub>	0.04	0.16
		CO	0.01	0.01
FG-1	Cooling Tower (5)	NH <sub>3</sub>	2.5	10.94
		VOC	1.01	4.40
FL-G14	CB and I Ammonia Flare	NH <sub>3</sub>	16.56	0.16
		CO	7.75	2.12
		NO <sub>x</sub>	9.19	0.33
		SO <sub>2</sub>	0.05	0.20
FL-G32	CB and I Propylene Flare	CO	2.47	2.17
		NO <sub>x</sub>	1.24	0.26
		VOC	3.89	0.10
		SO <sub>2</sub>	0.01	0.06
FL-G33	Barge Dock Ammonia Flare	NH <sub>3</sub>	0.10	0.01
		CO	0.15	0.44
		NO <sub>x</sub>	0.14	0.06
		SO <sub>2</sub>	0.05	0.20
FL-G34	Barge Dock Propylene Flare	CO	2.04	0.80
		NO <sub>x</sub>	0.40	0.10
		SO <sub>2</sub>	0.05	0.20
		VOC	2.77	0.31
FL-G4	Process Flare	CO	29.59	103.89
		NO <sub>x</sub>	6.51	20.54
		SO <sub>2</sub>	1.15	4.59
		VOC	13.09	9.55

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			lbs/hour	TPY (4)
FL-G4A	Ammonia Flare	NH <sub>3</sub>	0.92	0.13
		CO	4.13	2.22
		NO <sub>x</sub>	1.32	0.34
		SO <sub>2</sub>	0.11	0.07
FL-G5	Hydrogen Cyanide (HCN) Flare	CO	4.77	6.73
		NO <sub>x</sub>	0.83	1.98
		SO <sub>2</sub>	0.31	0.91
		VOC	1.09	4.76
G-2	Quench Water Clarifier Scrubber	VOC	1.25	0.08
		Acetone	0.01	0.01
H-4A and B	AOGIB No. 1 and No. 2 Absorber Off-Gas Incinerator/Boiler No. 1 and No. 2 <b>Combined Annual Limits (6)</b>	NH <sub>3</sub>	--	17.80
		CO	--	131.00
		NO <sub>x</sub>	--	630.80
		PM <sub>10</sub>	--	18.60
		SO <sub>2</sub>	--	7.60
		VOC	--	24.97
H-4A and B	AOGIB No. 1 and No. 2 Absorber Off-Gas Incinerator/Boiler No. 1 and No. 2 <b>Maximum hourly rate each (6)</b>	NH <sub>3</sub>	2.03	--
		CO	105	--
		NO <sub>x</sub>	150	--
		PM <sub>10</sub>	2.1	--
		SO <sub>2</sub>	0.9	--
		VOC	9.46	--
H-4C	AOGIB No. 3 Absorber Off-Gas Incinerator/Boiler No. 3	NH <sub>3</sub>	1.1	4.70
		CO	63	9.70
		NO <sub>x</sub>	90	119.60
		PM <sub>10</sub>	1.3	5.58
		SO <sub>2</sub>	0.4	1.90
		VOC	2.49	4.78

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			lbs/hour	TPY (4)
H4-D	AOGIB No. 4 Absorber Off-Gas Incinerator/Boiler No. 4	NH <sub>3</sub>	6.67	29.20
		CO	37.30	38.40
		NO <sub>x</sub>	72.1	236.80
		PM <sub>10</sub>	2.55	9.29
		SO <sub>2</sub>	0.19	0.84
		VOC	6.84	13.14
H-4A, H-4B, H-4C, and H4-D	Landfill Gas Combustion in Absorber Off-Gas Incinerators	SO <sub>2</sub>	0.16	0.68
		HCl	0.10	0.43
		HF	0.01	0.02
S-12B	AN Product Tank (7)	VOC	0.64	
S-12D	AN Product Tank (7)	VOC	0.64	
S-12A, B, and D	AN Product Tanks (7) Combined Annual Limits	VOC		3.84
S-12C	AN Product Tank	VOC	0.37	1.38
S-21	Catalyst Trap	PM <sub>10</sub>	1.02	4.46
S-22	Bag Filter	PM <sub>10</sub>	0.01	0.03
S-9A	Crude/Off Spec. AN Tank A (7)	VOC	0.61	
S-9B	Crude/Off Spec. AN Tank B (7)	VOC	0.61	
S-9A and S-9B	Crude/Off Spec. Tanks A and B Maintenance Emissions (7)	VOC	14.13	
S-9A and S-9B	Crude/Off Spec. Tanks A and B (7) Combined Annual Limits	VOC		2.49
WW-1	Waste Water Treatment	VOC	0.21	0.50
WW-2	Oxazole Regen Tank	VOC	0.01	0.01

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			lbs/hour	TPY (4)
Permit by rule (PBR) sources incorporated by reference. Sources remain authorized by the PBR(s) as listed below:				
106.262 Registration No. 93242				
FG-AN-III	Process Fugitives (5)	NH <sub>3</sub>	0.01	0.01
106.262 Registration No. 94795				
FG-AN-III	Process Fugitives (5)	VOC	0.07	0.32
106.262/106.262 Registration No. 87157				
H-4B	AOGIB No. 2 Absorber Off-Gas Incinerator/Boiler	VOC	1.10	4.83
		CO	0.36	1.59
106.262/106.262 Registration No. 92656				
FL-G14	CB and I Ammonia Flare	CO	0.23	1.03
		NO <sub>x</sub>	0.12	0.51
		SO <sub>2</sub>	0.01	0.06
106.262/106.262 Registration No. 92656				
FL-G33	Barge Dock Ammonia Flare	CO	0.09	0.41
		NO <sub>x</sub>	0.05	0.20
		SO <sub>2</sub>	0.01	0.02

Emission Sources - Maximum Allowable Emission Rates

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

\_\_\_\_ Hrs/day \_\_\_\_ Days/week \_\_\_\_ Weeks/year or 8,760 Hrs/year

- (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<sub>10</sub> - Total particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>, as represented  
CO - Carbon monoxide  
NH<sub>3</sub> - Ammonia  
HCl - Hydrochloric Acid  
HF - Hydrofluoric Acid
- (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) Annual emissions for AOGIBs No. 1 and No. 2 are combined because of the waste streams used for fuel and allow for the possibility that more of the waste streams may be fired in one boiler than the other.
- (7) The hourly rate is maximum for each tank and an annual rate is the combined total for all similar tanks.

Date August 6, 2014

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