

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 723 and PSD-TX-828M1

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 **
AP-1a	L-Area Gas Turbine (LGT)	NO <sub>x</sub>	27.46	120.29
		CO	38.53	168.74
		VOC	0.59	2.56
		PM <sub>10</sub>	2.09	9.16
		SO <sub>2</sub>	0.03	0.12
AP-2	N-3 Backup Instrument Air Compressor	NO <sub>x</sub>	6.21	2.23
		CO	1.26	0.45
		VOC	0.10	0.03
		PM	0.08	0.03
		SO <sub>2</sub>	0.01	0.01
CT-N5-N	N-5 Cooling Tower North	VOC	0.45	1.95
		PM	2.04	8.92
CT-N5-S	N-5 Cooling Tower South	VOC	0.62	2.72
		PM	2.84	12.44
CT-N7	N-7 Cooling Tower	VOC	1.67	7.33
		PM	7.65	33.51

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			lb/hr	TPY **
N-3	N7/8 Preheater	NO <sub>x</sub>	0.47	2.05
		CO	0.45	1.97
		VOC	0.03	0.14
		PM <sub>10</sub>	0.04	0.19
		SO <sub>2</sub>	0.01	
N-4	N-7/8 Absorber Feed Water Tank	HCN	0.01	0.01
		NH <sub>3</sub>	2.54	0.01
N-6	N 3/7 Feed and Exit Gas Flare	NO <sub>x</sub>	130.65	7.78
		CO	699.09	136.39
		VOC	0.22	0.09
		SO <sub>2</sub>	0.11	0.01
		HCN	28.36	1.77
		NH <sub>3</sub>	31.88	0.66
		Acetone	0.16	0.70
N-7	N-5/6 Safety Vent Stack	VOC	0.58	0.01
		NH <sub>3</sub>	1.46	0.13
N-8	N-3/4 Safety Vent Stack	VOC	0.58	0.01
		NH <sub>3</sub>	1.46	0.13
N-9	N7/8 SVG Fan	HCN	0.07	0.24
		NH <sub>3</sub>	0.02	0.03
N-10	N-3/4 Alcohol Tank	VOC	0.01	0.01
N-11	N-5/6 Alcohol Tank	VOC	0.01	0.01
N-12	N-3 Preheater	NO <sub>x</sub>	0.27	1.18
		CO	0.23	0.99
		VOC	0.02	0.07
		PM	0.02	0.09
		SO <sub>2</sub>	0.01	0.01
N-13	N-4 Preheater	NO <sub>x</sub>	0.27	1.18

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				lb/hr	TPY **
		CO	0.23	0.99	
		VOC	0.01	0.07	
		PM	0.02	0.09	
		SO <sub>2</sub>	0.01	0.01	
N-14	N-5/6 Preheater	NO <sub>x</sub>		1.19	5.21
		CO	1.00	4.38	
		VOC	0.06	0.29	
		PM	0.09	0.39	
		SO <sub>2</sub>	0.01	0.01	
N-15	N-7/8 Alcohol Tank	VOC		0.01	0.01
N-16	N-5 8-10Alcohol Storage Tank No. 27745	VOC		0.01	0.01
N-17	N5/6 Flare	NO <sub>x</sub>		152.13	48.41
		CO	450.52	235.34	
		VOC	2.13	3.20	
		SO <sub>2</sub>	0.11	0.03	
		HCN	23.98	16.96	
		NH <sub>3</sub>	171.72	49.15	
		Acetone		4.12	7.11
N-18	Wastewater Collection Tank No. 91357	HCN		0.02	0.01
N-19	N-5 Acetone Day Tank	Acetone		0.56	0.95
T-96662	Acetone Dock Tank	Acetone		1.36	2.33
FN	Fugitives (4)(5)	HCN		2.44	10.68
		NH <sub>3</sub>		0.52	2.26
		ACH	1.68	7.37	
		Acetone		1.35	5.92
		Fugitives (4) (6)		VOC	0.05

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			lb/hr	TPY **
			0.21	
		HCN	0.19	0.82
		NH <sub>3</sub>	0.49	2.17
		ACH	0.22	0.98
		Acetone		0.45
			1.96	
TK-FUG	Tank N-96662 Fugitives	Acetone	0.04	0.18

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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) HCN - hydrogen cyanide  
NH<sub>3</sub> - ammonia  
CO - carbon monoxide  
NO<sub>x</sub> - total oxides of nitrogen  
SO<sub>2</sub> - sulfur dioxide  
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1, does not include any VOCs speciated separately for an emission point  
PM - particulate matter, suspended in the atmosphere, including PM<sub>10</sub>  
PM<sub>10</sub> - 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.  
  
ACH - Acetone cyanohydrin
- (4) Emission rate is an estimate and compliance is demonstrated by meeting the requirements of the applicable Special Conditions and permit application representations.
- (5) Fugitive emissions until the maximum available control technology (MACT) (40 CFR Part 63 Subparts YY and FFFF) compliance dates.
- (6) Fugitive emissions after the MACT compliance dates.

\* 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 the annual emission rates are based on 12-month rolling basis.

Dated March 24, 2005