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		Air Contaminant	Emission Rates *	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY **
AP-2	N-3 Backup Instrument Air Compressor	NO _x CO VOC PM SO ₂	6.21 1.26 0.10 0.08 0.01	2.23 0.45 0.03 0.03 0.01
CT-N5-N	N-5 Cooling Tower North	VOC PM	0.45 2.04	1.95 8.92
CT-N5-S	N-5 Cooling Tower South	VOC PM	0.62 2.84	2.72 12.44
CT-N7	N-7 Cooling Tower	VOC PM	1.67 7.65	7.33 33.51
N-3	N-7/8 Preheater	NO_x CO VOC PM_{10} SO_2	0.88 0.84 0.06 0.09 0.01	3.83 3.70 0.27 0.38 0.01
N-4	N-7/8 Absorber Feed Water Tank	HCN NH₃	0.01 2.54	0.01 0.01
N-6	N-3/7 Feed and Exit Gas Fla	re NO _x CO VOC (other)	130.65 699.09 0.19	7.78 136.39 0.01

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission	Source	Air Contaminant	Emission	Emission Rates *		
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY **		
		CH₃CN SO₂ HCN NH₃ Acetone	0.03 0.11 28.36 31.88 0.16	0.09 0.01 1.77 0.66 0.70		
N-7	N-5/6 Safety Vent Stack	VOC NH₃	0.58 1.46	0.01 0.13		
N-8	N-3/4 Safety Vent Stack	VOC NH ₃	0.58 1.46	0.01 0.13		
N-9	N-7/8 SVG Fan	HCN NH₃	0.07 0.02	0.24 0.03		
N-10	N-3/4 Alcohol Tank	VOC	0.01	0.01		
N-12	N-3 Preheater	NO_x CO VOC PM_{10} SO_2	0.46 0.01 0.03 0.04 0.01	2.02 0.02 0.13 0.18 0.01		
N-13	N-4 Preheater	NO_x CO VOC PM_{10} SO_2	0.34 0.01 0.03 0.04 0.01	1.50 0.02 0.12 0.17 0.01		
N-14	N-5/6 Preheater	NO_x CO VOC PM_{10} SO_2	1.83 0.02 0.09 0.12 0.01	8.02 0.07 0.38 0.52 0.01		
N-15	N-7/8 Alcohol Tank	VOC	0.01	0.01		
N-16	N-5 8-10 Alcohol Storage Tar No. 27745	nk VOC	0.01	0.01		
N-17	N-5/6 Flare	NO_x	152.13	48.41		

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

		CO VOC (other) CH ₃ CN CH ₂ CHCN SO ₂ HCN NH ₃ Acetone	450.52 0.10 1.25 0.78 0.11 23.98 171.72 4.12	235.34 0.01 2.00 1.20 0.03 16.96 49.15 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 NH₃ ACH Acetone	2.44 0.52 1.68 1.35	10.68 2.26 7.37 5.92
	Fugitives (4) (6)	HCN NH₃ ACH Acetone CH₃CN CH₂CHCN	0.19 0.49 0.22 0.45 0.02 0.02	0.82 2.17 0.98 1.96 0.10 0.11
TK-FUG	Tank N-96662 Fugitives	Acetone	0.04	0.18

⁽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_3 - ammonia

- carbon monoxide CO

- total oxides of nitrogen NO_x

SO₂ - sulfur dioxide

- volatile organic compounds, as defined in Title 30 Texas Administrative Code § VOC 101.1, does not include any VOCs speciated separately for an emission point

- particulate matter, suspended in the atmosphere PM

- particulate matter equal to or less than 10 microns in diameter. Where PM is not PM_{10}

listed, it shall be assumed that no PM greater than 10 microns is emitted.

- acetone cyanohydrin ACH

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EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

CH₃CN - acetonitrile CH₂CHCN - acrylonitrile

- (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 Title 40 Code of Federal Regulations Part 63 Subparts YY and FFFF compliance dates.
- (6) Fugitive emissions after the MACT compliance dates.

*	Emission rates schedule:	are based on	and the	facilities a	are limited	by the	following	maximum	operating
	Hrs/day	Days/week _		Weeks/y	year	or F	Irs/year <u>8</u>	,760	

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

Dated May 5, 2009