

## Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 723 and PSDTX828M1

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)
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
N-3	N-7/8 Preheater	NO <sub>x</sub>	0.88	3.83
		CO	0.84	3.70
		VOC	0.06	0.27
		PM <sub>10</sub>	0.09	0.38
		SO <sub>2</sub>	0.01	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

Project Number:

## Emission Sources - Maximum Allowable Emission Rates

		VOC (other)	0.19	0.01
		CH <sub>3</sub> CN	0.03	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	N-7/8 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-12	N-3 Preheater	NO <sub>x</sub>	0.46	2.02
		CO	0.01	0.02
		VOC	0.03	0.13
		PM <sub>10</sub>	0.04	0.18
		SO <sub>2</sub>	0.01	0.01
N-13	N-4 Preheater	NO <sub>x</sub>	0.34	1.50
		CO	0.01	0.02
		VOC	0.03	0.12
		PM <sub>10</sub>	0.04	0.17
		SO <sub>2</sub>	0.01	0.01
N-14	N-5/6 Preheater	NO <sub>x</sub>	1.83	8.02
N-14	N-5/6 Preheater	CO	0.02	0.07

Project Number:

## Emission Sources - Maximum Allowable Emission Rates

		VOC	0.09	0.38
		PM <sub>10</sub>	0.12	0.52
		SO <sub>2</sub>	0.01	0.01
N-15	N-7/8 Alcohol Tank	VOC	0.01	0.01
N-16	N-5 8-10 Alcohol Storage Tank No. 27745	VOC	0.01	0.01
N-17	N-5/6 Flare	NO <sub>x</sub>	152.13	48.41
		CO	450.52	235.34
		VOC (other)	0.10	0.01
		CH <sub>3</sub> CN	1.25	2.00
		CH <sub>2</sub> CHCN	0.78	1.20
		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 (5) (6)	HCN	2.44	10.68
		NH <sub>3</sub>	0.52	2.26
		ACH	1.68	7.37
		Acetone	1.35	5.92
	Fugitives (5) (7)	HCN	0.19	0.82
		NH <sub>3</sub>	0.50	2.22

Project Number:

## Emission Sources - Maximum Allowable Emission Rates

		ACH	0.22	0.98
		Acetone	0.45	1.96
		CH <sub>3</sub> CN	0.02	0.10
		CH <sub>2</sub> CHCN	0.02	0.11
TK-FUG	Tank N-96662 Fugitives	Acetone	0.04	0.18
N_MSSTK	Fixed Roof Tank MSS	Isodecyl Alcohol	0.11	0.01
		HCN	0.92	0.01
N_MSSFR	Floating Roof Tank MSS	Acetone	68.80	0.25
N_MSSPH	Pump and Heat Exchanger MSS	HCN	0.17	0.01
		NH <sub>3</sub>	0.21	0.01
		ACH	0.22	0.02
		Acetone	0.19	0.01
		VOC (other)	0.05	0.01
N_DEGAS	Equipment Degassing	HCN	0.35	0.01
		NH <sub>3</sub>	1.50	0.01
		ACH	0.01	0.01
		Acetone	0.28	0.01
		VOC (other)	0.11	0.01
NMISCMSS	Miscellaneous MSS Activities	HCN	0.12	0.01
		NH <sub>3</sub>	0.06	0.01
		ACH	0.22	0.01
		Acetone	0.29	0.01
		H <sub>2</sub> SO <sub>4</sub>	0.11	0.01
		VOC (other)	0.16	0.01

Emission Sources - Maximum Allowable Emission Rates

- (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	-	total particulate matter, suspended in the atmosphere, including PM <sub>10</sub> and PM <sub>2.5</sub> , as represented
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
HCN	-	hydrogen cyanide
NH <sub>3</sub>	-	ammonia
ACH	-	acetone cyanohydrin
CH <sub>3</sub> CN	-	acetonitrile
CH <sub>2</sub> CHCN	-	acrylonitrile
- (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) Fugitive emissions until the maximum available control technology Title 40 Code of Federal Regulations Part 63 Subparts YY and FFFF compliance dates.
- (7) Fugitive emissions after the MACT compliance dates.

Date: \_\_\_\_\_