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_x	6.21	2.23
		CO	1.26	0.45
		VOC	0.10	0.03
		PM	0.08	0.03
		PM_{10}	0.08	0.03
		$PM_{2.5}$	0.08	0.03
		SO_2	0.01	0.01
CT-N5-N	N-5 Cooling Tower North	VOC	0.45	1.95
		PM	2.04	8.92
		PM_{10}	2.04	8.92
		$PM_{2.5}$	2.04	8.92
CT-N5-S	N-5 Cooling Tower South	VOC	0.62	2.72
		PM	2.84	12.44
		PM_{10}	2.84	12.44
		$PM_{2.5}$	2.84	12.44
CT-N7	N-7 Cooling Tower	VOC	1.67	7.33
		PM	7.65	33.51
		PM_{10}	7.65	33.51

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		$PM_{2.5}$	7.65	33.51
N-3	N-7/8 Preheaters NG fired, Total Firing Rate: 11MMBtu/hr	NO_x	0.30	1.21
		CO	0.01	0.05
		VOC	0.06	0.26
		PM	0.09	0.36
		PM_{10}	0.09	0.36
		$PM_{2.5}$	0.09	0.36
		SO_2	0.01	0.01
N-4	N-7/8 Absorber Feed Water Tank	HCN	0.01	0.01
		NH_3	2.54	0.01
N-6	N-3/7 Feed and Exit Gas Flare	NO_x	130.65	7.78
		CO	699.09	136.52
		VOC (other)	0.19	0.01
		CH_3CN	0.03	0.09
		SO_2	0.11	0.01
		HCN	28.36	1.77
		NH_3	31.88	0.66
		Acetone	0.16	0.70
N-7	N-5/6 Safety Vent Stack	VOC	0.58	0.01
		NH_3	1.46	0.13
N-8	N-3/4 Safety Vent Stack	VOC	0.58	0.01
		NH_3	1.46	0.13
N-9	N-7/8 SVG Fan	HCN	0.07	0.24
		NH_3	0.02	0.03

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N-10	N-3/4 Alcohol Tank	VOC	0.01	0.01
N-12	N-3/4 Preheaters	NO_x	0.30	1.21
		CO	0.01	0.05
		VOC	0.06	0.26
		PM	0.09	0.36
		PM_{10}	0.09	0.36
		$PM_{2.5}$	0.09	0.36
		SO_2	0.01	0.01
N-14	N-5/6 Preheater	NO_x	1.83	8.02
		CO	0.02	0.07
		VOC	0.09	0.38
		PM	0.12	0.52
		PM_{10}	0.12	0.52
		$PM_{2.5}$	0.12	0.52
		SO_2	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_x	152.13	48.41
		CO	450.52	235.34
		VOC (other)	0.10	0.01
		CH_3CN	1.25	2.00
		CH_2CHCN	0.78	1.20
		SO_2	0.11	0.03
		HCN	23.98	16.96

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		NH_3	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)	HCN	0.41	1.74
		NH_3	0.32	0.79
		ACH	0.33	1.44
		Acetone	0.27	1.20
		CH_3CN	0.08	0.33
		CH_2CHCN	0.05	0.21
		H_2SO_4	0.01	0.02
		CO	0.04	0.17
TK-FUG	Tank N-96662 Fugitives (5)	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_3	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_3	1.50	0.01

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		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_3	0.06	0.01
		ACH	0.22	0.01
		Acetone	0.29	0.01
		H_2SO_4	0.11	0.01
		VOC (other)	0.16	0.01
91052	Tank 91052 (93% Sulfuric Acid)	H_2SO_4	<0.01	<0.01
T-07520	Tank 07520 (93% Sulfuric Acid)	H_2SO_4	<0.01	<0.01

(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_x - total oxides of nitrogen
SO_2 - sulfur dioxide
PM - total particulate matter including PM_{10} and $PM_{2.5}$
PM_{10} - particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$
PM_{10} - particulate matter equal to or less than 2.5 microns in diameter
CO - carbon monoxide
HCN - hydrogen cyanide
NH_3 - ammonia
ACH - acetone cyanohydrin
CH_3CN - acetonitrile
CH_2CHCN - acrylonitrile
H_2SO_4 - sulfuric 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.

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Date: _____