

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 751/PSDTX987

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)
35-HR-5	HR-I Preheater	NOx	2.14	6.53
		SO <sub>2</sub> (PSD)	1.20	3.66
		CO	3.43	10.45
		PM	0.51	1.57
		PM <sub>10</sub>	0.51	1.57
		PM <sub>2.5</sub>	0.51	1.57
		VOC	0.17	0.52
36-HR-5	HR-II Preheater	NOx	1.34	3.67
		SO <sub>2</sub> (PSD)	1.03	2.81
		CO	5.51	15.08
		PM	0.50	1.37
		PM <sub>10</sub>	0.50	1.37
		PM <sub>2.5</sub>	0.50	1.37
		VOC	0.36	0.99
38-HR-5	HR-III Preheater	NOx	1.34	3.67
		SO <sub>2</sub> (PSD)	1.03	2.81
		CO	5.51	15.08
		PM	0.50	1.37
		PM <sub>10</sub>	0.50	1.37
		PM <sub>2.5</sub>	0.50	1.37
		VOC	0.36	0.99

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35-HR-11	HR-I Short Stack	NO <sub>x</sub>	23.10	16.17
		SO <sub>2</sub> (PSD)	1.18	0.82
		CO	6.93	4.85
		PM	0.63	0.44
		PM <sub>10</sub>	0.63	0.44
		PM <sub>2.5</sub>	0.63	0.44
		VOC	0.45	0.32
36-HR-11	HR-II Short Stack	NO <sub>x</sub>	23.10	16.17
		SO <sub>2</sub> (PSD)	1.18	0.82
		CO	6.93	4.85
		PM	0.63	0.44
		PM <sub>10</sub>	0.63	0.44
		PM <sub>2.5</sub>	0.63	0.44
		VOC	0.45	0.32
38-HR-11	HR-III Short Stack	NO <sub>x</sub>	15.68	10.97
		SO <sub>2</sub> (PSD)	1.18	0.82
		CO	6.93	4.85
		PM	0.63	0.44
		PM <sub>10</sub>	0.63	0.44
		PM <sub>2.5</sub>	0.63	0.44
		VOC	0.45	0.32
HR-8	HR Davy Stack	H <sub>2</sub> SO <sub>4</sub> (PSD)	16.36	57.31
		NO <sub>x</sub>	65.89	226.15
		SO <sub>2</sub> (PSD)	434.90	1769.60
		CO	1.01	3.54

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		PM	23.55	77.46
		PM <sub>10</sub>	23.55	77.46
		PM <sub>2.5</sub>	23.55	77.46
		VOC	11.78	25.38
96631	H <sub>2</sub> SO <sub>4</sub> Tank 96631	H <sub>2</sub> SO <sub>4</sub> <b>(PSD)</b>	<0.01	<0.01
96632	H <sub>2</sub> SO <sub>4</sub> Tank 96632	H <sub>2</sub> SO <sub>4</sub> <b>(PSD)</b>	<0.01	<0.01
35630	Primene Salt Tank	NH <sub>3</sub>	0.19	0.06
HR_MSSTK	Fixed Roof Tank MSS	H <sub>2</sub> SO <sub>4</sub>	0.02	<0.01
HR_MSSPH	Pump and Heat Exchanger MSS	VOC	<0.01	<0.01
		SO <sub>2</sub>	0.09	<0.01
		H <sub>2</sub> SO <sub>4</sub>	0.02	<0.01
HR_DEGAS	Process Openings for MSS	VOC	2.67	<0.01
		SO <sub>2</sub>	3.58	0.01
		H <sub>2</sub> SO <sub>4</sub>	<0.01	<0.01
HR_MISCMSS (5)	Miscellaneous Maintenance Activities	VOC	0.65	<0.01
		SO <sub>2</sub> <b>(5)</b>	1.73	0.01
		H <sub>2</sub> SO <sub>4</sub>	<0.01	<0.01
		PM	0.01	<0.01
		PM <sub>10</sub>	0.01	<0.01
		PM <sub>2.5</sub>	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<sub>x</sub> - total oxides of nitrogen

SO<sub>2</sub> - sulfur dioxide

CO - carbon monoxide

PM - total particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>

PM<sub>10</sub> - particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>

PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter

H<sub>2</sub>SO<sub>4</sub> - sulfuric acid

NH<sub>3</sub> - ammonia

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- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Miscellaneous Maintenance Activities (EPN HR\_MISCMSS) includes emissions of inherently low emitting activities identified in the Special Conditions with 0.03 lbs SO<sub>2</sub> emission assumed to occur in any hour evaluated and 0.001 tons of SO<sub>2</sub> emissions assumed in any 12 month period evaluated.

Date: April 19, 2017