Emission Sources - Maximum Allowable Emission Rates

Permit Number 751

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	9.60	40.47
		SO_2 **(PSD) (6)**	58.56	130.76
		CO	5.65	23.81
		PM_{10}	0.51	2.15
		VOC	0.37	1.56
36-HR-5	HR-II Preheater	NOx	9.60	40.47
		SO_2 **(PSD) (6)**	58.56	130.76
		CO	5.65	23.81
		PM_{10}	0.51	2.15
		VOC	0.37	1.56
38-HR-5	HR-III Preheater	NOx	9.60	40.47
		SO_2 **(PSD)(7)**	0.94	3.97
		CO	5.65	23.81
		PM_{10}	0.51	2.15
		VOC	0.37	1.56
35-HR-11	HR-I Short Stack	NOx	30.83	6.08
		SO_2 **(PSD)**	1.54	0.30
		CO	9.25	1.82
		PM_{10}	0.84	0.16
		VOC	0.61	0.12

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36-HR-11	HR-II Short Stack	NOx	30.83	6.08
		SO_2 **(PSD)**	1.54	0.30
		CO	9.25	1.82
		PM_{10}	0.84	0.16
		VOC	0.61	0.12
38-HR-11	HR-III Short Stack	NOx	30.83	6.08
		SO_2 **(PSD)**	1.54	0.30
		CO	9.25	1.82
		PM_{10}	0.84	0.16
		VOC	0.61	0.12
HR-8	HR Davy Stack	H_2SO_4 **(PSD)**	28.13	98.55
		NOx	66.11	424.50
		SO_2 **(PSD)**	434.90	1769.60
		CO	5.25	18.40
		PM_{10}	5.58	24.44
		VOC	4.04	17.68
96631	H_2SO_4 Tank 96631	H_2SO_4 **(PSD)**	<0.01	<0.01
96632	H_2SO_4 Tank 96632	H_2SO_4 **(PSD)**	<0.01	<0.01
35630	Primene Salt Tank	NH_3	0.14	0.001
HR_MSSTK	Fixed Roof Tank MSS	H_2SO_4	0.02	<0.01
HR_MSSPH	Pump and Heat Exchanger MSS	VOC	<0.01	<0.01
		SO_2	0.09	<0.01
		H_2SO_4	0.02	<0.01
HR_DEGAS	Process Openings for MSS	VOC	2.67	<0.01
		SO_2	3.58	0.01

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		H_2SO_4	<0.01	<0.01
HR_MISCMSS (8)	Miscellaneous Maintenance Activities	VOC	0.65	<0.01
		SO_2 **(8)**	1.73	0.01
		H_2SO_4	<0.01	<0.01
		PM	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) Exempt Solvent - Those carbon compounds or mixtures of carbon compounds used as solvents which have been excluded from the definition of volatile organic compound.
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
HRVOC - highly reactive volatile organic compounds as defined in 30 TAC § 115.10
IOC-U - inorganic compounds (unspeciated)
NO_x - total oxides of nitrogen
SO_2 - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
PM_{10} - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
CO - carbon monoxide
HAP - hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C
(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) Proposed SO_2 emissions from preheater 35-HR-5 and 36-HR-5 are based on each firing the maximum quantity of B-3 flare gas. The allowable SO_2 emission rates listed in the table are not additive, but represent a combined maximum for both preheaters.
(7) HR III preheater does not accept B3 flare gas; therefore, the SO_2 emissions are not the same from the HRIII preheater as HR I and HR II.
(8) Miscellaneous Maintenance Activities (EPN HR_MISCMSS) includes emissions of inherently low emitting activities identified in the Special Conditions with 0.03 lbs SO_2 emission assumed to occur in any hour evaluated and 0.001 tons of SO_2 emissions assumed in any12 month period evaluated.

Date: **August 21, 2012**