## Emission Sources - Maximum Allowable Emission Rates

## Permit Number 47091

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)
125	MEA Column Jet Scrubber Vent	MEA	0.01	0.01
		NH <sub>3</sub>	0.04	0.19
126	MEA Stripper Column	MEA	0.01	0.01
127	DEA Column Jet Vent	DEA	0.01	0.01
294	TEA Column Jet Vent	DEA	0.01	0.01
		TEA	0.01	0.01
RCTYK	Amines Recycle	MEA	0.01	0.03
		DEA	0.01	0.01
		TEA	0.01	0.01
131	Ammonia Flare	NH₃	1.43	6.28
		NO <sub>x</sub>	1.13	4.36
		со	3.58	10.52
		SO <sub>2</sub>	0.08	0.04
		voc	0.09	0.23
131	Ammonia Flare Maintenance Startup, and Shutdown	NH₃	10.00	0.04
		NO <sub>x</sub>	5.86	0.02
		со	7.35	0.04
		SO <sub>2</sub>	0.08	0.01
		voc	0.09	0.01
120-1	Tank 3600	MEA	0.24	0.15

Project Number: 188485

## Emission Sources - Maximum Allowable Emission Rates

120-3	Tank 3601	MEA	0.24	0.14
120-5	Tank 3603	DEA	0.01	0.01
120-7	Tank 3605	DEA	0.01	0.01
		TEA	0.01	0.01
120-9	Tank 3607	DEA	0.01	0.01
		TEA	0.01	0.01
120-11	Tank 3609	DEA	0.01	0.01
120-2	Tank 3700	MEA	0.24	0.14
120-4	Tank 3701	MEA	0.24	0.14
120-6	Tank 3703	DEA	0.01	0.01
120-13	Tank 3704	DEA	0.01	0.01
		TEA	0.01	0.01
120-8	Tank 3705	DEA	0.01	0.01
		TEA	0.01	0.01
120-10	Tank 3707	DEA	0.01	0.01
		TEA	0.01	0.01
120-12	Tank 3709	DEA	0.01	0.01
645	Fugitives (5)	Ethylene oxide	0.32	1.42
		NH <sub>3</sub>	0.73	3.21
		MEA	1.18	5.16

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- (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) DEA - diethanolamine MEA - monoethanolamine

NH<sub>3</sub> - ammonia

NO<sub>x</sub> - total oxides of nitrogen

SO<sub>2</sub> - sulfur dioxide
TEA - triethanolamine
CO - carbon monoxide

VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code §101.1

- (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.

Date:	August 20, 2013
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Project Number: 188485