

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 2005

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 (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
FS08211000	Vent Scrubber	VOC	5.96	0.08
		NH <sub>3</sub>	0.05	0.23
FL09522200	Loading Fugitives	VOC	0.01	0.01
FC09500100	Carbon Adsorption System	VOC	0.01	0.01
FL08511200	Loading Fugitives	VOC	<0.01	<0.01
FC09522200	Carbon Adsorption System	VOC	0.01	0.01
FL09227400	Loading Fugitives	VOC	0.01	0.01
FUG-MDI	MDI Area Fugitives (5)	VOC	1.87	8.18
		CO	0.42	1.83
		IOC-U	1.60	6.99
FC830WK010	Cooling Tower	VOC	1.47	6.44
		PM	0.44	1.93
		PM <sub>10</sub>	0.25	1.08
		PM <sub>2.5</sub>	<0.01	<0.01
FV09509900	CD Reactor	PM	0.02	<0.01
		PM <sub>10</sub>	0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
FV09520400	Hopper	PM	0.39	<0.01
		PM <sub>10</sub>	0.18	<0.01
		PM <sub>2.5</sub>	0.03	<0.01
FV09520800	Hopper	PM	0.58	<0.01
		PM <sub>10</sub>	0.28	<0.01
		PM <sub>2.5</sub>	0.04	<0.01
FS08011300	Scrubber Vent of Tank 080-004	VOC	0.06	0.02
FS08106600	MDA II Vent Scrubber (Tanks 081-045,081-076, and 081-159)	VOC	0.83	0.01
		NH <sub>3</sub>	0.01	0.01
FT09005400	Tank 090-054	VOC	0.03	0.01
FT09009600	Tank 090-096	VOC	0.03	0.01
FT09030100	Tank 090-301	VOC	5.52	0.01
FT09054800	Tank 090 548	VOC	0.01	0.01
FT09112030 (6)	Tank 091 120.3 (Group 2)	VOC	5.07	0.12

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FT09112040 (6)	Tank 091 120.4 (Group 2)	VOC	5.07	0.12
Total Annual Allowable Emissions Group 2 Tanks		VOC	-	0.18
FT09301900	Tank 093 019	VOC	0.03	0.01
FT09500100	Tank 095 001	VOC	0.03	0.01
FT09503320	Tank 095 033.2	VOC	0.18	0.01
FT09508300	Tank 095 083	VOC	2.74	0.01
FT09505900	Tank 095 059	VOC	0.01	0.01
FT09506000	Tank 095 060	VOC	0.01	0.01
FT09520500	Tank 095 205	VOC	0.01	0.01
FT09522500	Product Receiver 095-225	VOC	0.04	0.01
MDI-MSSATM MDI-TKTR	Tank Trucks	Aniline	0.02	0.01
		Monochlorobenzene	1.40	0.01
		Refrigerated Cooling Oil	0.09	0.01
		Monoethanolamine	0.01	0.01
		Total VOC	1.52	0.04
MDI-MSSATM MDI-FRCTK	Frac Tanks	Aniline	0.01	0.01
		Monochlorobenzene	0.53	0.01
		Monoethanolamine	0.02	0.01
		Total VOC	0.57	0.03
		HCl	0.01	0.01
		NH <sub>3</sub>	1.18	0.02
MDI-MSSATM MDI-SOL	Solids Handling	PM	0.73	0.01
		PM <sub>10</sub>	0.34	0.01
		PM <sub>2.5</sub>	0.05	0.01
MDI-MSSATM MDI-NH3	Ammonia Reaction Test	NH <sub>3</sub>	0.04	0.01
MDI-MSSATM MDI -WCAP	Waste Capsule Unloading	Monochlorobenzene	0.01	0.01
		o-Dichlorobenzene	0.01	0.01
		Total VOC	0.02	0.02
MDI-MSSATM MDI-INT	Instrument Clearing	Total VOC	0.06	0.01
		NH <sub>3</sub>	0.01	0.01
		Chlorine	0.01	0.01
MDI-MSSATM MDI-DRUM	Drum Loading	Monochlorobenzene	0.09	0.01
		Isopar C	0.28	0.01
		Therminol	0.01	0.01

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		Cyclohexane	0.98	0.02
		Total VOC	1.36	0.05
MDI-MSSATM MDI-VACTR	Vacuum Trucks	Aniline	0.11	0.01
		Monochlorobenzene	0.06	0.01
		Monoethanolamine	0.01	0.01
		Total VOC	0.18	0.03
		HCl	0.01	0.01
MDI-MSSATM MDI-UNCONT	Uncontrolled Equipment Clearing	Aniline	0.47	0.01
		Benzene	0.01	0.01
		Benzoic Acid	0.01	0.01
		Diethylene Glycol	0.03	0.01
		2,4-Dinitrophenol	0.01	0.01
		Formaldehyde	0.01	0.01
		Methanol	0.06	0.01
		Monochlorobenzene	42.18	0.44
		Monoethanolamine	0.03	0.01
		Nitrobenzene	0.01	0.01
		o-Dichlorobenzene	0.03	0.01
		Phenol	0.01	0.01
		Phosgene	0.01	0.01
		Solvent Naphtha	0.70	0.01
		Tripropylene Glycol	0.01	0.01
		NH <sub>3</sub>	4.52	0.03
		Chlorine	0.01	0.01
		CO	0.01	0.01
		HCl	0.01	0.01
		Refrigerated Cooling Oil	0.38	0.01
		Therminol	0.12	0.01
		Total VOC	44.08	0.60
MDI-MSSCNT MDI-CONT (7)	Controlled Equipment Clearing	Aniline	0.04	0.01
		Benzene	0.01	0.01
		Benzoic Acid	0.01	0.01
		Diethylene Glycol	0.01	0.01
		2,4-Dinitrophenol	0.01	0.01

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	Formaldehyde	0.01	0.01
	Methanol	0.01	0.01
	Monochlorobenzene	3.71	0.04
	Monoethanolamine	0.01	0.01
	Nitrobenzene	0.01	0.01
	o-Dichlorobenzene	0.01	0.01
	Phenol	0.01	0.01
	Phosgene	0.01	0.01
	Solvent Naphtha	0.01	0.01
	Tripropylene Glycol	0.01	0.01
	NH <sub>3</sub>	0.01	0.01
	Chlorine	0.01	0.01
	CO	0.01	0.01
	HCl	0.01	0.01
	Total VOC	3.88	0.18
	NOx	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  
 IOC-U - inorganic compounds (unspeciated)  
 NO<sub>x</sub> - total oxides of nitrogen  
 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  
 NH<sub>3</sub> - ammonia  
 HCl - hydrochloric 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.
- (6) Annual VOC emissions from these points may not exceed the allowable rate listed for Total Annual Allowable Emissions Group 2 Tanks.
- (7) See Attachment C Footnote 1 in Special Conditions for MDI-MSSCNT.

Date: January 27, 2020