

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 32835

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)
FV87820115	Central Thermal Oxidizer (CTO)	Acetone	0.02	
		CO	3.29	
		HCl	0.28	
		NH <sub>3</sub>	7.09	
		NO <sub>x</sub>	4.43	
		SO <sub>2</sub>	0.02	
		VOC	0.63	
		PM	0.17	
		PM <sub>10</sub>	0.17	
		PM <sub>2.5</sub>	0.17	
FF87826211	Vapor Combustor No. 1 (Production streams routed to backup control device)"	VOC	0.04	
		NO <sub>x</sub>	11.41	
		CO	4.38	
		NH <sub>3</sub>	0.64	
		HCl	0.82	
		SO <sub>2</sub>	0.20	
		PM	0.08	
		PM <sub>10</sub>	0.08	
		PM <sub>2.5</sub>	0.08	
FF87826303	Vapor Combustor No. 2 (Production streams routed to backup control device)"	VOC	0.06	
		NO <sub>x</sub>	6.53	
		CO	10.91	

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		NH <sub>3</sub>	0.63	
		SO <sub>2</sub>	<0.01	
		PM	0.19	
		PM <sub>10</sub>	0.19	
		PM <sub>2.5</sub>	0.19	
FV87826152	NSCR (Production streams routed to backup control device)"	VOC	0.02	
		NO <sub>x</sub>	2.18	
		CO	2.10	
		SO <sub>2</sub>	0.60	
FV87820115, FF87826211, FF87826303, and FV87826152	Annual Cap	Acetone		0.09
		CO		31.31
		HCl		4.64
		NH <sub>3</sub>		31.05
		NO <sub>x</sub>		26.11
		SO <sub>2</sub>		0.39
		VOC		2.69
		PM		1.03
		PM <sub>10</sub>		1.03
		PM <sub>2.5</sub>		1.03
FT878TDZ00	TDZ Wastewater Tote	VOC	<0.01	<0.01
		NH <sub>3</sub>	<0.01	<0.01
CTO-MSSATM /CTO-FRCK	Frac Tanks	Dinitrotoluene	0.01	0.01
		Mononitrotoluene	0.01	0.01
		Total VOC	0.02	0.02
CTO-MSSATM /CTO-VACTR	Vacuum Trucks	Mononitrotoluene	0.01	0.01
		Dinitrotoluene	0.01	0.01
		Total VOC	0.02	0.02

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CTO-MSSATM /CTO-INT	Instrument Clearing	Total VOC	0.01	0.01
CTO-MSSATM /CTO-CYL	Cylinder Usage	NO <sub>x</sub>	0.01	0.01
		CO	0.01	0.01
CTO-MSSATM /CTO-TKTR	Tank Trucks	Ammonia	1.14	0.01
		HCl	0.01	0.01
CTO-MSSATM /CTO-UNCONT	Uncontrolled Equipment	Aminomethylcyclohexane	0.01	0.01
		Toluidine	0.01	0.01
		Mononitrotoluene	0.24	0.01
		Toluene	0.14	0.01
		Benzene	0.01	0.01
CTO-MSSATM /CTO-UNCONT (continued)	Uncontrolled Equipment	n-Propane	0.01	0.01
		Aniline	0.01	0.01
		Monochlorobenzene	0.01	0.01
		Mononitrobenzene	0.01	0.01
		Phenol	0.01	0.01
		VOC	0.46	0.10
		Aqueous Ammonia	0.01	0.01
		HCl	0.01	0.01
CTO-MSSCNT /CTO-MAINT (5)	CTO Maintenance	Aliphatics	< 0.01	< 0.01
		Aniline	< 0.01	< 0.01
		Benzene	< 0.01	< 0.01
		Dichlorobenzene, o-	< 0.01	< 0.01
		H,H-Toluidine	< 0.01	< 0.01
		Monochlorobenzene	< 0.01	< 0.01
		Mononitrobenzene	< 0.01	< 0.01
		Mononitrotoluene	< 0.01	< 0.01
		Phenol	< 0.01	< 0.01

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		Toluene	0.01	0.01
		Toluenediamine	< 0.01	< 0.01
		Toluidine	< 0.01	< 0.01
		VOC	0.02	0.02
		Ammonia	1.27	0.95
		CO	7.97	5.98
		HCl	0.04	0.03
		NO <sub>x</sub>	15.83	11.88
		SO <sub>2</sub>	0.80	0.60
		PM	0.14	0.11
		PM <sub>10</sub>	0.14	0.11
		PM <sub>2.5</sub>	0.14	0.11
FV87820115 / CTO-CO	Excess CO Emissions on Start-up / Shutdown, MR III CO Purging, TDI II CO Purging	CO	5.00	0.19
		NO <sub>x</sub>	0.24	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  
 NH<sub>3</sub> - ammonia  
 HCl - hydrochloric acid  
 PM - total particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>, as represented  
 PM<sub>10</sub> - total particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>, as represented  
 PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) See Attachment C Footnote 1 in Special Conditions for CTO-MSSCNT. CTO-MSSCNT includes temporary control devices and EPNs: FF87826211, FF87826303, FV87826152, and FV87820115.

Date: November 18, 2022