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	3.28	
		HCl	1.06	
		NH_3	7.09	
		NO_x	4.18	
		SO_2	0.02	
		VOC	0.57	
FF87826211	Vapor Combustor No. 1 (Production streams routed to backup control device)"	VOC	<0.01	
		NO_x	3.40	
		CO	0.93	
		NH_3	0.96	
		HCL	0.04	
		SO_2	0.20	
FF87826303	Vapor Combustor No. 2 (Production streams routed to backup control device)"	VOC	<0.01	
		NO_X	1.43	
		CO	4.76	
		NH_3	0.63	
		SO_2	<0.01	
FV87826152	NSCR (Production streams routed to backup control device)"	VOC	0.02	
		NO_X	2.18	

Emission Sources - Maximum Allowable Emission Rates

		CO	2.10	
		SO_2	0.60	
FV87820115, FF87826211, FF87826303, and FV87826152	Annual Cap	Acetone		0.06
		CO		14.36
		HCL		4.64
		NH_3		22.39
		NO_X		18.31
		SO_2		0.38
		VOC		2.50
FT878TDZ00	TDZ Wastewater Tote	VOC	<0.01	<0.01
		NH_3	<0.01	<0.01
CTO-MSSATM /CTO-FRCTK	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
CTO-MSSATM /CTO-INT	Instrument Clearing1	Total VOC	0.01	0.01
CTO-MSSATM /CTO-CYL	Cylinder Usage	NO_x	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

Emission Sources - Maximum Allowable Emission Rates

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
		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
		Total VOC	0.46	0.10
		Aqueous Ammonia	0.01	0.01
		HCl	0.01	0.01
CTO-MSSCNT /CTO-MAINT **(6)**	CTO Maintenance (streams routed to backup control device)"	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
		Toluene	0.03	0.01
CTO-MSSCNT /CTO-MAINT (continued) **(6)**	CTO Maintenance (streams routed to backup control device)"	Toluenediamine	0.01	0.01
		Toluidine	0.01	0.01

Emission Sources - Maximum Allowable Emission Rates

		Total VOC	0.14	0.12
		Ammonia	1.12	0.56
		CO	1.82	0.91
		HCl	0.62	0.31
		NO_x	2.70	1.35
		SO_2	5.30	2.65
FV87820115 / CTO-CO	Excess CO Emissions on Start-up / Shutdown	CO	5.00	0.19
CTO-MSSCNT /MR3-COPRG **(6)**	MR III CO Purging	CO	20.00	0.22
		NO_x	0.28	0.01
CTO-MSSCNT /TDI2-COPRG **(6)**	TDI II CO Purging	CO	0.80	0.01
		NO_x	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_x - total oxides of nitrogen
SO_2 - sulfur dioxide
CO - carbon monoxide
NH_3 - 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) See Attachment C Footnote 1 in Special Conditions for CTO-MSSCNT. CTO-MSSCNT includes temporary control devices and EPN: FF87826211, FF87826303, FV87826152, and FV87820115.

Date: March 24, 2016