Emission Sources - Maximum Allowable Emission Rates

Permit Number 22197

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)
FL02300700	DNT Loading/Unloading Losses	VOC	0.01	0.02
FT02310400	Sulfuric Acid Tank	H_2SO_4	0.01	0.01
FT02310600	Soda Ash Solution Tank	PM	0.01	0.01
FS02332000	Soda Ash Scrubber	PM	0.03	0.01
FS05021700	South o-TDA Tank Scrubber	VOC	0.01	0.02
FS05028000	Wastewater Tank Scrubber	VOC	0.01	0.01
FV06001200	Vent	VOC	0.01	0.01
		HCl	0.01	0.01
FT06045600	Wastewater Tank	VOC	0.01	0.01
FV06502200	Stack	VOC	0.01	0.01
		HCl	0.01	0.01
FV06519800	Residue Storage	PM	0.02	0.09
FL06524400	Residue Loading	PM	0.02	0.09
FG830705HP	Emergency Engine	CO	2.32	0.12
		NO_x	12.57	0.63
		PM_{10}	1.17	0.06
		SO_2	0.72	0.04
		VOC	1.35	0.07
TDI-FUG	Equipment Fugitives (5)	VOC	1.45	6.35
		NH_3	0.49	2.08

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		$COCl_2$	0.01	0.01
		Cl_2	0.01	0.02
		HCl	0.01	0.05
		H_2SO_4	0.08	0.33
TDI-MSSATM /TDI-TKTR	Tank Truck Loading and Unloading	o-Dichlorobenzene	0.09	0.01
		p-Dichlorobenzene	0.01	0.01
		Toluene diisocyanate	0.01	0.01
		Nitrotoluene	0.01	0.01
		Dinitrotoluene	0.01	0.01
		Cresol	0.01	0.01
TDI-MSSATM /TDI-TKTR (continued)	Tank Truck Loading and Unloading	Toluene diamine	0.01	0.01
		Refrigerated Cooling Oil	1.40	0.01
		Total VOC	1.55	0.08
TDI-MSSATM /TDI-FRCTK	Frac Tanks and Temporary Storage Vessels	o-Dichlorobenzene	0.01	0.01
		Toluene diisocyanate	0.01	0.01
		Toluene diamine	0.01	0.01
		Nitrotoluene	0.01	0.01
		Dinitrotoluene	0.01	0.01
		Total VOC	0.05	0.05
TDI-MSSATM /TDI-SLD	Solids Handling	PM	0.36	0.01
		PM_{10}	0.17	0.01
		$PM_{2.5}$	0.03	0.01
TDI-MSSATM /TDI-INT	Instrument Cleaning	Total VOC	0.05	0.01
		Ammonia	0.01	0.01
		Cl2	0.01	0.01

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TDI-MSSATM /TDI-DRUM	Drum, Tote, Bucket and Small Vessel Loading	o-Dichlorobenzene	0.01	0.01
		Refrigerated Cooling Oil	0.24	0.01
		Toluene diamine	0.01	0.01
		Isopar K	0.01	0.01
		Total VOC	0.27	0.04
TDI-MSSATM /TDI-VACTR	Vacuum Trucks	o-Dichlorobenzene	0.28	0.01
		Nitrotoluene	0.01	0.01
		Dinitrotoluene	0.01	0.01
		Toluene diamine	0.01	0.01
		Total VOC	0.31	0.04
TDI-MSSATM /TDI-UNCONT	Uncontrolled Equipment Clearing	Aminomethylcyclohexane	0.01	0.01
		Bitumen	1.44	0.01
		CCl_4	0.01	0.01
		$CHCl_3$	0.01	0.01
		Cresol	0.02	0.01
		Diaminomethylcyclohexane	0.06	0.01
		Dinitrotoluene	0.01	0.01
		Methanol	0.01	0.01
		Naphtha	0.05	0.01
		Nitrotoluene	0.01	0.01
		ODB	20.51	0.43
		PDB	1.42	0.02
		Phosgene	0.01	0.01
		RCO	1.58	0.01
		TDA	0.01	0.01

Emission Sources - Maximum Allowable Emission Rates

		TDA Residues	0.01	0.01
		TDI	0.01	0.01
		Toluene	0.04	0.01
TDI-MSSATM /TDI-UNCONT (continued)	Uncontrolled Equipment Clearing	Toluidine	0.28	0.03
		Mineral Oil	0.13	0.01
		Total VOC	25.63	0.65
		Ammonia	0.06	0.01
		Cl_2	0.01	0.01
		CO	0.01	0.01
		HCl	0.10	0.01
		NO_x	0.01	0.01
TDI-MSSCNT /TDI-CONT	TDI Train MSS Controlled Emissions	Aminomethylcyclohexane	0.01	0.01
		Bitumen	0.01	0.01
		CCl_4	0.01	0.01
		$CHCl_3$	0.01	0.01
		Cresol	0.01	0.01
		Diaminomethylcyclohexane	0.01	0.01
		Dinitrotoluene	0.01	0.01
		Methanol	0.01	0.01
		Naphtha	0.01	0.01
		Nitrotoluene	0.01	0.01
		ODB	1.39	0.02
		PDB	0.05	0.01
		Phosgene	0.01	0.01
		RCO	0.11	0.01

Emission Sources - Maximum Allowable Emission Rates

		TDA	0.01	0.01
TDI-MSSCNT /TDI-CONT (continued)	TDI Train MSS Controlled Emissions	TDA Residues	0.01	0.01
		TDI	0.01	0.01
		Toluene	0.01	0.01
		Toluidine	0.01	0.01
		Total VOC	1.71	0.20
		Ammonia	0.01	0.01
		Cl_2	0.01	0.01
		CO	0.31	0.01
		HCl	0.01	0.01
		NO_x	0.15	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
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
HCl - hydrogen chloride
H_2SO_4 - sulfuric acid
$COCl_2$ - phosgene
Cl_2 - chlorine
NH_3 - ammonia
TDA - toluene diamine
TDI - toluene diisocyanate
CCl_4 - carbon tetrachloride
ODB - o-dichlorobenzene
PDB - p-dicholobenzene
RCO - refrigerated cooling oil
(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 Footnote 1 in Special Conditions for TDI-MSSCNT

Emission Sources - Maximum Allowable Emission Rates

Date: December 6, 2013