

Emission Sources - Maximum Allowable Emission Rates

Permit Number 2006A

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)
FT14005010	Xylene Storage Tank	Xylene	1.86	0.07
FT14005020	PMA Tank	VOC	0.24	0.01
FS13010400	Butyl Acetate Storage Tank Scrubber	VOC	0.02	< 0.01
FF14004300	Coatings Flare	VOC	1.24	0.21
		NO _x	0.23	0.25
		CO	2.01	2.15
		SO ₂	< 0.01	< 0.01
FC14004310	Carbon Drum Alternate Control (5)	VOC	0.04	0.02
FV14015720	HDI Catalyst Weigh Tank (Seal Pot)	VOC	0.27	< 0.01
FV14059800	HDI Catalyst Hold Tank (Seal Pot)	VOC	0.27	< 0.01
FL14006000	BA Loading - Truck	VOC	0.06	< 0.01
FL14050600	MEKO Loading - Truck	VOC	0.02	< 0.01
FL14052000	Aromatic 100 Loading - Truck	VOC	0.03	< 0.01
FL14006300	Hexanol/Diol Loading - Truck	VOC	< 0.01	< 0.01
FC14513900	Area 145 - Catalyst Weigh & Hold Tanks (to CAS)	VOC	0.08	< 0.01
FC14602400	Raw Material Unloading (to CAS)	VOC	< 0.01	< 0.01
FC14602401	Modifieds Drumming - ASU (to CAS)	VOC	0.02	< 0.01
FC14704500	Catalyst Prep Tanks (to CAS)	VOC	0.05	< 0.01
FV14000568	HDI Trimer/Biuret Sampling Vent	VOC	< 0.01	< 0.01
FC14000568	HDI Trimer/Biuret Sampling Vent (to CAS)	VOC	< 0.01	< 0.01

Emission Sources - Maximum Allowable Emission Rates

FV14070600	Area 140 Trimer Sampling Vent	VOC	< 0.01	< 0.01
FC14070600	Area 140 Trimer Sampling Vent (to CAS)	VOC	< 0.01	< 0.01
FV14070900	Area 140 Biuret Sampling Vent	VOC	< 0.01	< 0.01
FC14070900	Area 140 Biuret Sampling Vent (to CAS)	VOC	< 0.01	< 0.01
FV14526700	Area 145 Prepolymers Sampling Vent	VOC	< 0.01	< 0.01
FC14526700	Area 145 Prepolymers Sampling Vent (to CAS)	VOC	< 0.01	< 0.01
FUG-1	Fugitives (6)	VOC	1.39	6.10
FV14500700	Solids Loading Station	PM	0.10	< 0.01
		PM ₁₀	0.10	< 0.01
		PM _{2.5}	0.10	< 0.01
FV13018744	Heat Cleaning Oven	VOC	0.02	0.02
		NO _x	0.03	0.03
		CO	0.05	0.05
		SO ₂	< 0.01	< 0.01
		PM	0.01	0.01
		PM ₁₀	0.01	0.01
		PM _{2.5}	0.01	0.01
MOD-MSSATM / MOD-TKTR	Tank Trucks	Butyl Acetate	0.60	0.01
		Xylene	3.73	0.01
		Butanol	3.17	0.01
		Aromatic-100	2.74	0.01
		1-methoxy-2-propanol acetate (PMA)	4.58	0.01
		Ethyl Hexanol	0.10	0.01
		Ethyl Hexanediol	0.51	0.01
MOD-MSSATM / MOD-TKTR	Tank Trucks	Hexamethylene-1,6-diisocyanate (HDI)	0.01	0.01

Emission Sources - Maximum Allowable Emission Rates

		Refrigerated Cooling Oil	0.13	0.01
		MEKO	0.18	0.01
		Total VOC	15.75	0.10
MOD-MSSATM / MOD-FRCK	Frac Tanks	Butyl Acetate	0.09	0.01
		Xylene	0.05	0.01
		Butanol	0.05	0.01
		Aromatic-100	0.06	0.01
		Ethyl Hexanol	0.01	0.01
		2-Ethyl 1,3 Hexanediol	0.01	0.01
		1-methoxy-2-propanol acetate (PMA)	0.10	0.01
		Hexamethylene-1,6-diisocyanate (HDI)	0.01	0.01
		Refrigerated Cooling Oil (RCO)	0.04	0.01
		Total VOC	0.42	0.09
MOD-MSSATM / MOD-DRUM	Drum Clearing	Butyl Acetate	0.09	0.02
		2-Ethyl Hexanol (EH)	0.01	0.01
		2-Ethyl 1,3 Hexanediol	0.01	0.01
		MEKO	0.01	0.01
		Xylene	0.05	0.01
		Butanol	0.04	0.01
		Aromatic-100	0.04	0.01
		1-methoxy-2-propanol acetate (PMA)	0.06	0.01
		Hexamethylene-1,6-diisocyanate (HDI)	0.01	0.01
		Refrigerated Cooling Oil (RCO)	0.01	0.01
		Total VOC	0.33	0.11

Emission Sources - Maximum Allowable Emission Rates

MOD-MSSATM / MOD-NH3	Ammonia Reaction Test	NH3	0.04	0.01
MOD-MSSATM / MOD-INT	Instrument Clearing	VOC	0.02	0.01
		Cl ₂	0.01	0.01
MOD-MSSATM / MOD-VACTR	Vacuum Trucks	VOC (Butyl Acetate)	0.04	0.01
MOD-MSSATM / MOD-FLTR	Uncontrolled Filters (7)	VOC	0.25	0.10
MOD-MSSCNT / MOD-FLTR	Controlled Filters (7)	VOC	0.02	0.01
		NO _x	< 0.01	< 0.01
		CO	< 0.01	< 0.01
MOD-MSSATM / MOD-UNCONT	Uncontrolled Equipment Clearing	VOC	8.35	0.53
MOD-MSSCNT / MOD-CONT	Controlled Equipment Clearing	VOC	8.58	0.33
		NO _x	0.95	0.01
		CO	1.58	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
 SO₂ - sulfur dioxide
 CO - carbon monoxide
 PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented
 PM₁₀ - 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
 EH - 2-Ethyl Hexanol
 EHD - 2-Ethyl 1,3 Hexanediol
 HDI - hexamethylene-1,6-diisocyanate
 MEKO - methyl ethyl ketone oxime
 PMA - 1-methoxy-2-propanol acetate
- (4) Compliance with annual emission limits (tons per year) is based on a rolling 12-month period.
- (5) The carbon adsorption system shall be used during periods when the flare is out of service, not to exceed 1000 hours/year.
- (6) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
- (7) Controlled and uncontrolled "filter" emissions previously authorized with respective "equipment clearing" emissions are represented separately without an emission increase or physically separate emission point of origin. Total VOC authorized rates for "filters" and "equipment" do not exceed previously authorized rates for "equipment".

Date: December 14, 2018

Emission Sources - Maximum Allowable Emission Rates