EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 53610

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. 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	Emission Rates* lb/hr	TPY **
SCRUB1POLY	Solution Plant Scrubber Normal Operations	VOC	25.56	22.33
		SO_2	0.10	0.35
		PM	0.10	0.10
		Acetone	0.98	2.84
		H_2SO_4	0.10	0.10
		HCl	0.10	0.10
		HCN	0.10	0.10
SCRUB1POLY -MSS	Solution Plant Scrubber Planned MSS Activities	VOC	1.51	0.27
T-3523	Solution Plant Scale Tank	VOC	0.10	0.10
T-3592	Solution Plant In-Process Tank and Storage Tank (4)	VOC	0.10	0.10
T-35155	Solution Plant In-Process Tank and Storage Tank (4)	VOC	0.10	0.10
T-3520	RX In-Process Vessel and Storage Tank	VOC	3.54	0.61
SCRUB1EMUL	Emulsion Plant Scrubber Normal Operations	VOC	16.84	7.95
		PM	0.10	0.10
		H_2SO_4	0.10	0.10
		NH_4Cl	0.10	0.10
		Acetone	0.10	0.10

SCRUB1EMUL	Emulsion Plant Scrubber	VOC	1.35	0.37
-MSS	Planned MSS Activities	PM	0.01	0.01

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name(2)	Air Contaminant Name	Emission Rates* lb/hr	TPY **
T-3503	Diethylenetriamine (DETA) Storage Tank	VOC	0.10	0.10
T-3539	Acrylic Acid Storage Tank	VOC	0.63	0.14
T-3567	Heavy Aromatic Naphta/ Naphtalene Storage Tank	VOC	0.49	0.10
T-3571	Methacrylic Acid Storage Tank	VOC	0.07	0.33
SCRUB-FORM	Formalin, 37 percent Storage Tank w/Scrubber	VOC	0.46	0.02
T-3573	Nonyl Phenol Storage Tank	VOC	0.10	0.10
T-3575	Morpholine Storage Tank	VOC	3.97	0.10
T-3568	Duo O Storage Tank	VOC	0.10	0.10
T-3593	COAG 111 Storage Tank 1	VOC	0.10	0.10
T-35107	COAG 111 Storage Tank 2	VOC	0.10	0.10
Carb-Can	Allyl Glycidyl Ether (AGE) Storage Tank w/Carbon Canister	VOC	3.06	0.02
PK-3536	Sodium Bisulfite Storage Tank w/Scrubber	VOC	0.20	0.87
DIESEL 1	Fuel Tank for Solution Plant	VOC	0.10	0.10

	Emergency Generator			
DIESEL 2	Fuel Tank for Emulsion Plant Emergency Generator	VOC	0.10	0.10
DIESEL 3	Fuel Tank for Fire Pump	VOC	0.10	0.10

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name(2)	Air Contaminant Name	Emission Rates* lb/hr	TPY **
T-35120	Acrylamide 53 percent Storage Tank	VOC	0.10	0.10
T-35124	Vista Oil Storage Tank	VOC	0.10	0.10
T-35129	Vista Oil Storage Tank	VOC	0.10	0.10
T-3563	Spent IPA	VOC	0.15	0.10
		Acetone	0.10	0.10
T-35101	Spent IPA	VOC	0.15	0.10
		Acetone	0.10	0.10
T-3515	COAG 123 Product Storage Tank	VOC	0.10	0.10
T-3516	COAG 105 Product Storage Tank	VOC	0.10	0.10
T-3517	COAG 105 Product Storage Tank	VOC	0.10	0.10
T-3578	MD-115A Product Storage Tank	VOC	0.64	0.05
T-3521	COAG 93D Product Storage Tank	VOC	0.10	0.10

T-3522	DCA 222 Product Storage Tank	VOC	0.10	0.10
T-3576	CI-11C Product Storage Tank	VOC	0.10	0.10

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name(2)	Air Contaminant Name	Emission Rates* lb/hr	TPY **
T-3577	CI-46C Product Storage Tank	VOC	0.10	0.10
T-3582	COAG 117 Product Storage Tank	VOC	0.10	0.10
T-3595	COAG 139 Product Storage Tank	VOC	0.10	0.10
T-35162	MEA Feed Tank	VOC	0.03	0.01
T-35300	Formalin Feed Tank	VOC	0.01	0.01
SP-FUG	Solution Plant Fugitives (5) (from Components)	VOC Acetone	2.85 0.10	8.76 0.10
TOTEB-SP	Solution Plant Fugitives (5) (from Tote Bins)	VOC	1.63	0.46
EP-FUG	Emulsion Plant Fugitives (5) (from Components)	VOC Acetone	0.10 0.10	0.31 0.10
TOTEB-EP	Emulsion Plant Fugitives (5) (from Tote Bins)	VOC	0.10	0.10
HOT-BOX	Emusion Plant Bldg. Fugitives (5)	VOC	0.10	0.10

	(from Hot Box)			
HOT-RM	Fugitive Emissions (5) (from Hot Room)	VOC	0.10	0.10
SP-LOAD	Solution Plant Loading to Drums/Totes and Trucks	VOC	10.66	0.79
		Acetone	0.69	0.10
		Hydrogen Chloride	0.01	0.01

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name(2)	Air Contaminant Name	Emission Rates* lb/hr	TPY **
EP-LOAD-TR	Emulsion Plant Loading to Trucks	VOC	4.94	0.20
		NH_4Cl	0.01	0.01
		HCl	0.01	0.01
SCREEN-FUG	Product Screening Fugitives (5)	VOC	0.10	0.24
COOL	Cooling Tower	PM	0.32	1.41
		Cl_2	0.10	0.10
		Br_2	0.10	0.10
BOIL-1	Boiler 1 (South)	NO_x	1.25	4.51
		CO	1.05	3.79
		VOC	0.10	0.25
		SO_2	0.19	0.68
		PM	0.10	0.34
BOIL-2	Boiler 2 (North)	NO_x	1.25	4.51
		CO	1.05	3.79
		VOC	0.10	0.24
		SO_2	0.19	0.68
		PM	0.10	0.34
HEAT-1	Hot Oil Heater	NO_x	1.20	4.33
		CO	1.01	3.64
		VOC	0.10	0.24

		SO_2	0.18	0.65
		PM	0.10	0.33
SP-EMGEN	Solution Plant Emergency Generator	NO_x	5.10	0.10
		CO	1.33	0.10
		VOC	0.15	0.10
		SO_2	0.10	0.10
		PM	0.11	0.10

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name(2)	Air Contaminant Name	Emission Rates* lb/hr	TPY **
EP-EMGEN	Emulsion Plant Emergency Generator	NO_x	5.10	0.10
		CO	1.33	0.10
		VOC	0.15	0.10
		SO_2	0.10	0.10
		PM	0.11	0.10
FRPUMP	Fire Pump	NO_x	5.10	0.49
		CO	1.33	0.13
		VOC	0.13	0.10
		SO_2	0.10	0.10
		PM	0.11	0.10
MSS - AWA	Arc Welding Planned MSS Activities	PM	0.01	0.01
MSS - PVI	Pumps, Valves, and Instruments Planned MSS Activities	VOC	0.06	0.01
MSS - PRV	Pressure Relief Valves Planned MSS Activities	VOC	0.07	0.01
MSS -TANK	Tank Waterwash Planned MSS Activities	VOC	0.15	0.01

MSS - T3598	Washout Water Storage Tank Planned MSS Activities	VOC	2.90	0.01
MSS - T35303	Washout Water Storage Tank Planned MSS Activities	VOC	0.69	0.01

(1) Emission point identification - either specific equipment designation or emission point number from a plot plan.
(2) Specific point source names. For fugitive sources, use an area name or fugitive source name.

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

(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 - particulate matter, suspended in the atmosphere, including PM_{10}.
PM_{10} - particulate matter equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no PM greater than 10 microns is emitted.
CO - carbon monoxide
HCl - hydrogen chloride
HCN - hydrogen cyanide
H_2SO_4 - sulfuric acid
NH_4Cl - ammonium chloride
Cl_2 - chlorine
Br_2 - bromine
(4) Tanks T-3592 and T-35155 will be used interchangeably as an in-process tank, but not simultaneously.
(5) Emission rate is an estimate and compliance is demonstrated by meeting the requirements of the applicable special conditions and permit application representations.

* Emission rates are based on and the facilities are limited by the following maximum operating schedule:

8,760 Hrs/year

** Compliance with annual emission limits is based on a rolling 12-month period.

Dated May 4, 2009