EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 3179

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 (3)	Emission Rates * lb/hr	TPY**
A1333	HIPA Flare (7)	CO	0.9	4.0
		NO_x 0.1	0.6	
		VOC 0.1	0.4	
ANALYZER	Process Analyzers	VOC	0.1	0.2
CWT13	Cooling Water Tower	VOC	2.1	9.2
CWT18	Cooling Water Tower	VOC	2.1	9.2
CPI	CPI Separator	VOC	4.0	3.0
D306/D307	Phenol Tanks	VOC	53.2	5.0
D313	Toluene Tank	VOC	7.9	0.7
D342	Cumene Tank (5)	VOC	18.1	2.4
D342	Cumene Tank (6)	VOC	40.8	
D345	Acetone Tank	Acetone	0.7	1.1
D390	Acetone Tank	Acetone	1.7	2.0
D391	Acetone Tank	Acetone	1.7	2.0
D392	Acetone Tank	Acetone	1.7	2.0
D393	Benzene Tank	VOC	0.49	1.2
D394	Cumene Tank	VOC		1.5

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	Emission Rates * TPY**
D395	Cumene Tank	VOC		0.5
D394/D395	Cumene Tanks	VOC	35.3	
D400	Cumene Tank	VOC	4.2	0.5
D402/D403	Phenol Tanks	VOC	6.2	5.1
D8100	Storage Tank	Benzene	0.34	0.42
		VOC 0.38	0.90	
E8256	Cleavage Reactor Vent	Acetone	1.3	5.7
E8309	Acetone Finishing Column	Acetone	1.0	4.4
EPFLARE	East Property Flare	CO	8.2	4.8
		NO_x	1.6	1.0
		VOC 27.0	15.8	
EX67	Caustic Tank	Caustic	0.5	0.1
EX80	Wastewater Tank	Acetone	0.1	0.2
		VOC 0.4	0.4	
F335	Acetone Tank	Acetone	0.8	0.9
F354	Acetone Tank	Acetone	2.1	4.0
F8300	Heavy Ends Furnace	CO	0.4	1.9
		NO_x 1.6	7.6	
		PM_{10}	0.2	0.8
		SO_2	0.1	0.1
		VOC 0.1	0.2	

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
F8301	Regen. Furnace	CO	0.1	0.1
		NO_x 0.3	0.1	
		PM_{10}	0.1	0.1
		SO_2	0.1	0.1
		VOC 0.1	0.1	
G330	Cumene Tank	VOC		15.2
G331	Cumene Tank	VOC		15.2
G330/G331	Cumene Tanks	VOC	40.8	
H9200	Incinerator	Acetone	8.90	8.00
		CO 0.91	1.25	
		NO_x 6.90	8.81	
		PM_{10}	0.40	0.52
		SO_2	0.10	0.10
		VOC 24.11	10.04	
	(9)	Acetone	9.00	8.24
		CO 0.91	1.25	
		NO_x 6.92	8.84	
		PM_{10}	0.40	0.52
		SO_2	0.10	0.10
		VOC 24.11	10.04	
H87002	Thermal Oxidizer	Acetone	1.5	3.4
		CO 1.75	2.46	
		NO_x	3.15	4.37
		PM_{10}	0.15	0.11
		VOC 6.78	26.72	
LDLSDMK	Acetone Loading Losses	Acetone	4.39	2.78

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
P87107	Diesel Engine (Fire Water Pump)	CO	1.6	0.1
		NO_x	7.4	0.4
		PM_{10}	0.5	0.1
		SO_2	0.5	0.1
		VOC 0.6	0.1	
P87921	Diesel Engine (Demin. Water Pump)	CO	0.4	0.1
		NO_x	1.9	0.1
		PM_{10}	0.1	0.1
		SO_2	0.1	0.1
		VOC 0.2	0.1	
S303A	Sulfuric Acid Tank	H_2SO_4	0.1	0.1
SCRWRTC/	Acetone Land Loading	Acetone	1.2	1.0
SCRWRTT	Acetone Land Loading	Acetone	1.2	1.0
T74B	Acetone Tank	Acetone	1.04	1.38
T182	Acetone Tank	Acetone	1.14	1.76
T665	Acetone Tank	Acetone	0.4	1.0
T770	Water Tank	VOC	0.1	0.1
T87301	Acetone Tank	Acetone	0.6	
T87302	Acetone Tank	Acetone	0.6	
T87301/T87302	Acetone Tanks	Acetone		3.8
T87920	Water Tank	VOC	0.1	0.1
V8217	V-8217 Relief Drum	VOC	0.1	0.4

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
V8321	Jet Condenser Vent (8)	Acetone	4.91	12.03
		VOC	0.01	0.02
V8342	Vent Stream Collection Vessel	VOC	0.1	0.2
V9300	Phenol Land Loading	VOC	2.9	0.6
FUGPAU3	Phenol 3 Fugitives (4)	Acetone	0.5	2.2
		VOC	2.68	11.87
PAUFE	Phenol 2 Fugitives (4)	VOC	11.2	48.6
WRACKFE	Acetone Land Loading Fugitives (4)	Acetone	6.7	5.4

(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 area name or fugitive source name.
(3) Caustic - sodium phenate
CO - carbon monoxide
H_2SO_4 - sulfuric acid
NO_x - total oxides of nitrogen

PM_{10} - particulate matter (PM) equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no particulate matter greater than 10 microns is emitted.

SO_2 - sulfur dioxide
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1

(4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
(5) Emission limits during normal operations.
(6) Emission limits in the event that it becomes necessary to offload a cumene barge into Tank D342.
(7) The emission rates listed for the HIPA Flare include only the Phenol 3 contributions to the flare. The HIPA flare has additional grandfathered emissions of 1.2 lb/hr (5.3 TPY) of propylene and 1.8 lb/hr (7.9 TPY) of propane that are not included in the allowable emissions on this table.
(8) These emissions shall be controlled to EPN H9200 or eliminated pursuant to Special Condition No. 5.
(9) Emissions include the venting of EPN V8321 to this control device or the elimination of EPN V8321.

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

24 Hrs/day 7 Days/week 52 Weeks/year

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

Dated