EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 7719A

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.

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
		AIR CONTAMINANTS DATA		
F-CT3	Cooling Tower	VOC	0.07	0.29
		Chlorine	0.03	0.12
		Bromine	0.03	0.12
F-R1	Process Fugitives (4)	VOC	1.82	7.99
		H_2S	0.03	0.13
	Process Fugitives (4, 5)	VOC	2.10	9.22
		H_2S	0.05	0.22
F-R2	Powder Boxing Stations	PM	<0.01	0.01
	Powder Boxing Stations (5)	PM		<0.01
	0.02			
F-R3	Blower Discharge	PM	0.14	0.61
H-8	No. 1 Heater	CO	1.25	5.48
		NO_x	2.39	10.48
		SO_2	0.96	0.10
		VOC	0.10	0.44
		PM	0.49	2.15
H-9	No. 2 Heater	CO	1.25	5.48
		NO_x	2.39	10.48
		SO_2	0.96	0.10
		VOC	0.10	0.44
		PM	0.49	2.15
R-R1	North DCB Railcar	VOC	0.62	2.72
R-R2	NaSH Railcar	H_2S	0.07	0.34

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
R-V1	Acetic Acid Scrubber	VOC	0.01	<0.01

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
R-V2	Crude NMP Surge Tank Cond.	VOC	0.54	2.38
		H_2S	0.10	0.38
R-V3	No. 1 Cure Vessel	VOC	0.14	0.52
		PM_{10}	0.62	1.92
		PM	3.45	14.29
	No. 1 Cure Vessel (5)	VOC	0.14	0.52
		PM_{10}	<0.01	0.01
		PM	0.03	0.14
R-V4	No. 2 Cure Vessel	VOC	0.14	0.52
		PM_{10}	0.62	1.92
		PM	3.45	14.29
	No. 2 Cure Vessel (5)	VOC	0.14	0.52
		PM_{10}	<0.01	0.01
		PM	0.03	0.14
R-V5	No. 3 Cure Vessel	VOC	0.14	0.52
		PM_{10}	0.62	1.92
		PM	3.45	14.29
	No. 3 Cure Vessel (5)	VOC	0.14	0.52
		PM_{10}	<0.01	0.01
		PM	0.03	0.14
R-V6	No. 4 Cure Vessel	VOC	0.14	0.52
		PM_{10}	0.62	1.92
		PM	3.45	14.29
	No. 4 Cure Vessel (5)	VOC	0.14	0.52
		PM_{10}	<0.01	0.01
		PM	0.03	0.14

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
R-V7	DCB Skid Vacuum Pump	VOC	0.03	0.11
R-V8	Dehydration Scrubber	VOC	0.01	0.03
		H_2S	<0.01	0.01
R-V9	Extruder Vacuum Jet	VOC	0.04	0.12
	Extruder Vacuum Jet (5)	VOC	0.06	0.12
R-V10	Glass Port Blower Vent	VOC	1.05	4.38
	Glass Port Blower Vent (5)	VOC	1.74	4.38
R-V11	Low-Pressure K. O. Pot	VOC	0.57	2.02
		H_2S	0.39	1.73
R-V12	Process Water Sump	VOC	0.02	0.07
R-V13	No. 1 Dryer Vent (6)	VOC	0.75	3.28
R-V14	No. 3 Dryer Vent	VOC	4.30	11.66
		PM_{10}	1.43	6.28
R-V15	No. 1 Belt Filter	H_2S	0.01	0.03
R-V16	Train B No. 2 Dryer Vent (5)	VOC	4.29	11.66
		PM_{10}	0.28	1.23
R-V17	Train B No. 2 Dehydration Scrubber (5)	VOC	0.01	0.03
		H_2S	<0.01	0.01

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
R-V18	No. 2 Low-Pressure K. O. Pot (5)	H_2S	0.39	1.70
T-95-28	Lights Column Phase Separator 0.33	VOC	0.07	
T-95-114	NMP Storage Tank	VOC	0.02	0.07
T-95-136	Filter Feed Tank	VOC	0.12	0.45
		H_2S	0.12	0.45
T-95-160	No. 6 Slurry Tank	VOC	0.01	0.04
T-95-166	NMP Heavies (M-5)	VOC	0.86	0.10
T-95-167	Crude NMP Tank (M-6)	VOC	0.02	0.07
T-95-169A	S. Fresh/Recycle NMP	VOC	0.02	0.07
T-95-169B	N. Fresh/Recycle NMP	VOC	0.02	0.07
T-95-170	NaSH Storage Tank	H_2S	3.24	0.56
T-95-174	No. 1 Slurry Tank	VOC	0.01	0.04
T-95-182	NaSH Waste/Recycle Tank	H_2S	4.68	0.07
T-95-YA04	Train B No. 2 Feed Filter Tank 0.45	VOC	0.12	
		H_2S	0.12	0.45

(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

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY

or fugitive source name.

(3) VOC - volatile organic compounds as defined in General Rule 101.1
NO_x - total oxides of nitrogen
SO_2 - sulfur dioxide
PM_{10} - particulate mater less than 10 microns in diameter
PM - particulate matter; includes PM_{10} from that emission point
CO - carbon monoxide
H_2S - hydrogen sulfide

(4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.

(5) Emission rate after the installation of emission controls as specified in Special Condition No. 7 and production increase above the interim limit.

(6) Emission point void after deottlenecking allows production to be increased above the interim limit.

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

_____Hrs/day ____Days/week ____Weeks/year or 8,760 Hrs/year

Dated _____