EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 1862A

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
1	Caustic Scrubber	Decanoyl Chloride	0.013	<0.01
		PVCl	0.25	0.055
		HCl	0.18	0.035
		VOC	0.20	0.013
4	South ARI (4)(6)	VOC	15.10	20.30
		HCl	0.57	2.31
		$COCl_2$	0.26	0.63
		PVCl	0.09	0.03
		Pivalic Acid	0.12	0.02
		Decanoyl Chloride	<0.01	<0.01
		Neodecanoic Acid	<0.01	<0.01
5	Phosgene Plant Flare (Before EPN 53 is placed on line)	Cl_2	<0.001	<0.001
		CO	23.8	79.76
		$COCl_2$	<0.001	<0.001
		NO_x	0.056	0.20
5	Phosgene Plant Flare (After EPN 53 is placed on line)	Cl_2	<0.001	<0.001
		CO	0.8	3.34
		$COCl_2$	<0.001	<0.001
		NO_x	0.006	0.025
11	North Boiler	CO	0.665	2.91
		NO_X	2.66	11.65
		PM_{10}	0.14	0.62
		SO_2	0.011	0.05
	VOC	0.11	0.48	

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
12	North ARI (4)(6)	See footnotes.		
F13	North Chloro-Formates Area Fugitives (5)	VOC	0.56	1.38
14	Caustic Scrubber	VOC (7)	2.44	0.51
		HCl	0.331	0.03
F15	Storage Tanks Fugitives (5)	VOC	0.18	0.79
F16	PRC Area Fugitives (5)	VOC	0.14	0.61
F17	PRC Storage Fugitives (5)	VOC	0.08	0.35
F19	New Products Area Fugitives (5)	VOC	0.83	3.617
		$COCl_2$	<0.001	0.002
	HCl	0.001	0.007	
F23	Phosgene Plant Fugitives (5)	Cl_2	0.05	0.21
		CO	0.005	0.02
		$COCl_2$	<0.001	0.002
		VOC	0.006	0.03
F24	South ARI Area Fugitives (5)	VOC	0.076	0.333
		$COCl_2$	<0.001	<0.001
25	Reactor RX-3100 PM_{10} Vent	PM_{10}	0.03	0.016
26	Cyclo Vent	VOC	<0.001	<0.001
		PM_{10} (Z-ASP)	0.02	0.045

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Emission Point No. (1) *	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr	TPY
F27	Dryer Fugitives (5)	PM_{10} (Z-ASP)	<0.01	<0.01
28	Fitz Dryer Vent	VOC	0.06	0.031
		PM_{10} (Z-ASP)	0.11	0.41
29	Rx Charge	VOC	<0.01	<0.01
	Bag House	PM_{10} (Z-ASP)	<0.01	<0.01
30	Acid Storage Vent	HCl	<0.01	<0.01
F31	Z-ASP Reactor Rx Fugitives (5)	VOC (Na-Z-ASP)	0.52	1.92
F36	BCF Storage Tank Fugitives (5)	VOC	0.035	0.15
F37	DMC Storage Tank Fugitives (5)	VOC	0.02	0.10
38	Centrifuge Hold Tank	VOC	0.008	<0.001
39	Centrifuge	VOC	0.09	0.022
40	Centrifuge Trans Tank	VOC	0.001	<0.001
41	DMO Loading	VOC	0.012	0.001
42	Water Scrubber	HCl	<0.01	<0.01
43	Water Scrubber	HCl	<0.01	<0.01
44	DDI Drumming	VOC	<0.01	<0.01

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AIR CONTAMINANTS DATA

Emission Point No. (1) *	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr	TPY
45	Reactor RX-3100 VOC Vent	VOC (Na-L-ASP)	<0.01	<0.01
46	Tank T-3111	VOC (Na-Z-ASP)	<0.01	<0.01
47	Tank T-3112	VOC (Na-Z-ASP)	<0.01	<0.01
48	Tank T-3113	VOC (Na-Z-ASP)	<0.01	<0.01
49	Tank T-3114	VOC (Na-Z-ASP)	<0.01	<0.01
F50	Tank Area Fugitives (5)	VOC (Na-Z-ASP)	<0.01	<0.01
51	Truck Loading Emissions	VOC (Na-Z-ASP)	<0.01	<0.01
53	Thermal Oxidizer (4)(6)	Cl_2	0.08	0.34
		CO	0.60	2.50
		$COCl_2$	0.146	0.555
		HCl	0.205	0.784
		NO_x	0.60	0.63
		VOC	3.46	5.71
F54	Thermal Oxidizer Area Fugitives (5)	$COCl_2$	<0.001	<0.001
		VOC	<0.01	0.01
F55	Cold Vent Fugitives (5)	$COCl_2$	<0.001	<0.001
		VOC	<0.01	0.03
V-ETOH-1	Ethanol Tank Vent	Ethanol	5.71	0.28
V-MEOH-1	Methanol Tank	Methanol	8.02	0.36

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Emission Point No. (1) *	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr	TPY
	Vent			
V-2EHOH-1	2EHOH Tank Vent	2-Ethyl Hexanol	0.04	<0.01
V-ISOBUT-1	IBOH Tank Vent	Isobutanol	1.78	0.03
V-SECBUT-1	SBOH Tank Vent	Sec-Butyl Alcohol	3.00	0.06
V-DEG-1	DEG Tank Vent	Diethylene Glycol	<0.01	<0.01
V-BZOH-1	BZOH Tank Vent	Benzyl Alcohol	0.015	<0.01
F-TRK-LDG	Load Area Fugitives (5)	VOC	0.28	1.23
F-BZOH	BZOH Storage Tank Fugitives (5)	VOC	0.02	0.09
F-MOSF	Multi-Purpose Organic Synthesis Facility Fugitives (5)	VOC	0.10	0.46
		$COCl_2$	<0.01	<0.01
F-CO	CO Storage Area Fugitives (5)	CO	0.15	0.66

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

(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) BCF - benzyl chloroformate
BZOH - benzyl alcohol
Cl_2 - chlorine
CO - carbon monoxide
$COCl_2$ - phosgene
DDI - dimer diisocyanate
DEG - diethylene glycol
DMC - dimethyl carbonate
DMO - 4,4-dimethyl oxazolidinone
2EHOH - 2-ethyl hexanol
HCl - hydrochloric acid
IBOH - isobutanol
L-ASP - L-aspartic Acid
Na-Z-ASP - sodium salt of carbobenzoxy aspartic acid
NH_3 - ammonia
NO_x - total oxides of nitrogen
PM - particulate matter
PM_{10} - particulate matter less than 10 microns
POBA - polyoxybutylene alcohol
PRC - polyoxybutylene alcohol chloroformate
PVCl - pivaloyl chloride
SBOH - sec-butyl alcohol
SO_2 - sulfur dioxide
VOC - volatile organic compounds as defined in General Rule 101.1
Z-ASP - carbobenzoxy aspartic acid
(4) The permit holder, at his option, may emit all or part of the emissions allowed from the South ARI (EPN 4) through the North ARI (EPN 12). The sum of all emissions from both EPN 4 and EPN 12 may not exceed the maximum allowable emission rates shown for EPN 4.
(5) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
(6) EPN 53 shall be placed on line no later than February 1, 1997. When this changeover takes place, EPNs 4 and 12 shall be relegated to back up or emergency service only.

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

(7) EPN added or emissions rate increased due to the consolidation of a standard exemption.

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

Hrs/day_____Days/week_____Weeks/year_____or Hrs/year___
8,760 ___

Dated ____