EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 47029

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**
TCS-A1	Scrubber CL-1401	HCl	0.10	0.03
TCS-A3	Scrubber CL-1403	HCl	0.01	0.01
TCS-A4	Bag House BF-1201	PM (Si)	0.01	0.03
KBE/ABC-A	Scrubber CL-1001	AN	0.02	0.03
		EtOH 0.05	0.11	
		MeOH	0.03	0.01
		PO 0.01	0.02	
		ACl 0.02	0.05	
		PO-HCl	0.01	0.01
		VOC (other)	0.11	0.01
ABC-A4	Scrubber CL-3202	EtOH	0.02	0.07
		MeOH	0.01	0.01
		ACl 0.07	0.25	
		HCl 0.01	0.04	
		H2S 0.01	0.01	
ABC-A6	ABC Baghouses	PM	0.01	0.01
BOILER-A1 or A2	Boiler A1 or Boiler A2	NO_x	0.46	2.01
		CO 0.92	4.02	
		PM 0.01	0.06	
		VOC 0.05	0.23	
		SO_2 0.19	0.82	

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**
INCINE-A1 or A2	Incinerator A1 or Incinerator A2	NO_x	0.90	3.93
		CO	1.34	5.87
		PM 0.26	1.14	
		VOC 0.22	0.44	
		SO_2 0.04	0.18	
		HCl 0.59	0.35	
		Cl_2 0.05	0.04	
CF-FUG	CF Fugitives	VOC (incl. speciated VOC)	2.06	9.04
		AN 0.07	0.29	
		EtOH 0.67	2.94	
		PO 0.11	0.50	
		ACl 0.14	0.63	
		NH_3 0.02	0.09	
		HCl 0.01	0.02	
		$HSiCl_3$	0.01	0.02
		$SiCl_4$ 0.07	0.31	
TCS-FUG	Trichlorosilane Fugitives (Emissions prior to HCl Sythesis Unit project)	HCl	0.02	0.10
		$HSiCl_3$	0.13	0.59
		$SiCl_4$	0.30	1.31
		Si 0.01	0.01	
		SiO_2 0.01	0.01	
TCS-FUG	Trichlorosilane Fugitives (Emissions after HCl Synthesis Unit project)	HCl	<0.01	<0.01
		$HSiCl_3$ 0.59		0.13
		$SiCl_4$	0.30	1.31
		Si 0.01	0.01	
		SiO_2 0.01	0.01	
KBM-FUG	KBM-803 Fugitives (4)	VOC	0.04	0.19
		H_2S 0.01	0.06	
		Na_2S 0.01	0.01	

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**
ULOADFUG	Loading/Unloading Fugitives	VOC	0.24	0.01
	(Emissions prior to HCl and F3	HCl	0.01	0.04
	Synthesis Unit projects)	$HSiCl_3$	0.01	0.01
		$SiCl_4$	0.01	
		H_2S	0.01	
ULOADFUG	Loading/Unloading Fugitives	VOC	0.32	0.01
	(Emissions after HCl and F3	HCl	0.01	0.01
	Synthesis Unit projects)	$HSiCl_3$	0.01	0.01
		$SiCl_4$	0.07	0.01
CTOWER	Cooling Tower	PM	0.01	0.01
		VOC	0.01	
HCL-1	Tower CL-1701	HCl	0.07	<0.01
F3-1	Scrubber CL-2501	VOC	45.79	5.06
F3-2	Scrubber CL-4501	VOC	0.01	0.01
HCl-FUG	HCl Fugitives	HCl	0.06	0.28
		Cl_2	0.06	0.26
		Si	<0.01	<0.01
F3-FUG	F3 Fugitives	VOC	0.79	3.45

(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.
(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

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**

listed, it shall be assumed that no particulate matter greater than 10 microns is emitted.

CO - carbon monoxide
HCl - hydrogen chloride
AN - acrylonitrile
ACl - allylchloride
EtOH - ethanol
PO - propyleneoxide
PO-HCl - propylene oxide-hydrochloric acid complex
NH_3 - ammonia
Si - silicon
SiO_2 - silicon dioxide
Cl_2 - chlorine
$SiCl_4$ - silicontetrachloride
$HSiCl_3$ - Trichlorosilane
H_2S - Hydrogen Sulfide
Na_2S - Sodium Sulfide

* 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

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

Dated_____