

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 18734

This table lists the maximum allowable emission rates for all sources of air contaminants covered by this permit.

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates</u>	
			lb/hr	
	TPY(4)			
E1YASE, E1RHWSE1, E1RHWSE2, E1RWJASE2	CF6-E1,2, 2e 0.21	Inorganic Acids (6)	0.50	2.18
		Fab Scrubbers Inorganic Bases		0.05
E2YASE, E2RHWSE E2RWJASE		Specialty Gases (7)	1.77	7.74
		VOC	0.84	3.69
		Exempt Solvents (5)	8.31	36.89
E1YASE, E2YASE	Main Acid Scrubbers	HCl	0.13	0.56
		Sulfuric Acid	1.18	5.16
E1RAMSE1, E1RAMSE2 E2RAMSE	Ammonia Scrubbers	Inorganic Bases	0.11	0.48
E1REP4 through E1REP17	EPI Reactors vented through scrubbers	HCl	0.02	0.07
E1RSVE1-8, E2RSVE	Silane Vents	Specialty Gases (7)	0.01	<0.001
		POC	0.01	<0.001
BCDRASE	Bulk Chemical Building Scrubber	Inorganic Acids (6)	0.02	0.10
		HCl	0.01	0.03
		Sulfuric Acid	0.06	0.26
BCDRSE1	CF6-E1,2,2e Concentrator/Oxidizer	VOC	5.53	23.76
		Exempt Solvent (5)	0.31	1.35
		Inorganic Bases	0.11	0.48
		NO _x	1.86	8.15
		SO ₂	0.01	0.01
		CO	0.22	0.95
		PM	0.02	0.09
		VOC (combustion)	0.01	0.06

E1RSE1, E1RSE2, E2ERSE	CF6-E1,2,2e Solvent Bypass Stacks	VOC	74.79 (8)	6.28 (8)
		Exempt Solvents	3.53 (8)	0.30 (8)
		Inorganic Bases	0.11 (8)	0.48 (8)
BCDRSE2	BCD Solvent Stack	VOC	0.01	0.01
		Exempt Solvents (5)	0.01	0.01
E3RASE1	Backside Spin Etch Scrubber	Inorganic Acids (6)	0.06	0.25
		Sulfuric Acid	0.01	0.06
E3RASE2	CF6-E3 Fab Scrubbers	Inorganic Acids (6)	0.10	0.42
		HCl	0.03	0.11
		Sulfuric Acid	0.23	1.00
		Inorganic Bases	0.03	0.13
		Specialty Gases (7)	0.34	1.50
		VOC	0.16	0.72
		Exempt Solvents (5)	1.61	7.06
E3RSE2	CF6-E3 Concentrator/Oxidizer	VOC	1.07	4.61
		Exempt Solvent (5)	0.06	0.26
		NO _x	1.86	8.15
		SO ₂	0.01	0.01
		CO	0.22	0.95
		PM	0.02	0.09
		VOC (combustion)	0.01	0.06
E3RSE3	CF6-E3 Bypass Stack	VOC	14.52 (8)	1.22 (8)
		Exempt Solvents (5)	0.69 (8)	0.06 (8)
SSTK1	NaOH Tank	NaOH	0.01	<0.001
SSTK2	HCl Tank	HCl	0.01	<0.001

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates</u>	
			lb/hr	TPY (4)

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates</u>	
			lb/hr	TPY (4)
SSTK5 and SSTK6 FUG-T, FC1	Waste Solvent Tanks and Fugitives	VOC	0.44	1.63
		Exempt Solvents (5)	0.31	0.76
HCl-FUG	HCl Tank Fugitives	HCl	0.01	<0.01
ALL (9)	ALL (9)	any single HAP		<10
		total HAP	<25	

(1) Emission point identification - emission point number from plot plan.

(2) Specific point source name

(3) VOC - volatile organic compounds as defined in 30 Texas Administrative Code Section 101.1

HCl - hydrogen chloride

NO_x - total oxides of nitrogen

SO₂ - sulfur dioxide

CO - carbon monoxide

PM - particulate matter, suspended in the atmosphere, including PM₁₀

PM₁₀ - particulate matter 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 in emitted.

POC - products of combustion including NO_x, SO₂, PM, CO, and VOC

NaOH - sodium hydroxide

HAP - hazardous air pollutants

(4) Emission rates for 12-month period.

(5) Exempt solvents are compounds excluded from the definition of VOC in 30 TAC §101.1

(6) Inorganic acids does not include HCl and sulfuric acid.

- (7) Specialty gases are inorganic compounds other than acids and bases.
- (8) Emission rates are based on a limited operating schedule of 168 hours per year.
- (9) ALL- includes all sources of air contaminants covered by this permit.

Dated October 15, 2001