

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 21233

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**

#### Building 12-19

(Effective until Building 11-50 is fully operational. Deleted upon full operations at Building 11-50.)

12-19 FUG	Fugitives (4)	VOC	0.10	0.10
		HAP	0.10	0.10
SROTOCLONE	South Rotoclone	VOC	5.00	0.50
		PM	0.03	0.01
		HAP	5.00	0.50
NROTOCLONE	North Rotoclone	VOC	12.00	3.40
		PM	0.15	0.20
		HAP	12.00	1.00

#### Building 11-50, Bays 1, 6, and 8

11-50 TE1	Bay 1 Task Exhaust	VOC	9.00	3.00 (5)
		PM	0.10	0.10 (5)
		Total HAP		3.00 (5)
		NO <sub>x</sub>	3.00	0.50 (5)
		Ammonia	9.90	0.70 (5)
		Sulfur trioxide	0.30	0.10 (5)
11-50 TE6	Bay 6 Task Exhaust	VOC	9.00	
		NO <sub>x</sub>	3.00	
		PM	0.10	
		Ammonia	9.90	
		Sulfur trioxide	0.30	

## 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**
11-50 TE8	Bay 8 Task Exhaust	VOC	9.00	
		PM	0.10	
		NO <sub>x</sub>	3.00	
		Ammonia	9.90	
		Sulfur trioxide	0.30	
<u>Building 11-50, Bays 2, 3, 5, and 7</u>				
11-50 TE2	Bay 2 Task Exhaust	VOC	5.50	1.00 (6)
		PM	0.20	0.30 (6)
		Total HAP		1.00 (6)
11-50 TE3	Bay 3 Task Exhaust	VOC	5.50	
		PM	0.20	
11-50 TE5	Bay 5 Task Exhaust	VOC	5.50	
		PM	0.20	
11-50 TE7	Bay 7 Task Exhaust	VOC	5.50	
		PM	0.20	
<u>Building 11-50, Vacuum Vents 1, 2, and 3</u>				
11-50 VV1	Vacuum Vent 1	VOC	3.00	1.00 (7)
		PM	3.00	0.10 (7)
		Total HAP		1.00 (7)
		NO <sub>x</sub>	7.00	0.50 (7)
		Ammonia	3.00	0.20 (7)
		Sulfur trioxide	0.30	0.01 (7)
11-50 VV2	Vacuum Vent 2	VOC	3.00	
		PM	3.00	
		NO <sub>x</sub>	7.00	
		Ammonia	3.00	
		Sulfur trioxide	0.30	

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

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

## 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**
11-50 VV3	Vacuum Vent 3	Total Organics	3.00	
		PM	3.00	
		NO <sub>x</sub>	7.00	
		Ammonia	3.00	
		Sulfur trioxide	0.30	
<u>Building 11-55</u>				
11-55 PS1	Dust Collector 1 Stack	VOC	17.10	3.97 (8)
		NO <sub>x</sub>	0.70	0.22 (8)
		SO <sub>3</sub>	0.10	0.10 (8)
		CO	0.64	0.21 (8)
		NH <sub>3</sub>	13.50	4.40 (8)
		HCl	0.10	0.10 (8)
		HCN	0.24	0.08 (8)
		Nitric Acid	1.00	0.01 (8)
		Nitrous Oxide	7.70	2.78 (8)
		HAP		1.51(8)
11-55 PS2	Dust Collector 2 Stack	VOC	17.10	
		NO <sub>x</sub>	0.70	
		SO <sub>3</sub>	0.10	
		CO	0.64	
		NH <sub>3</sub>	13.50	
		HCl	0.10	
		HCN	0.24	
		Nitric Acid	1.00	
		Nitrous Oxide	7.70	
11-55 PS3	Dust Collector 3 Stack	VOC	11.93	0.57
		NO <sub>x</sub>	0.11	0.01
		SO <sub>3</sub>	0.10	0.01
		CO	0.01	0.01
		NH <sub>3</sub>	0.50	0.13
		HCl	0.10	0.10
		HCN	0.01	0.01
		Nitric Acid	0.05	0.01
		Nitrous Oxide	0.11	0.04
		HAP		0.16

## 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**
11-55 PS4	Condenser Stack	VOC	16.83	1.51
		NO <sub>x</sub>	0.30	0.50
		SO <sub>3</sub>	0.50	0.01
		CO	0.15	0.05
		NH <sub>3</sub>	2.00	0.69
		HCl	0.10	0.10
		HCN	0.06	0.02
		Nitric Acid	0.50	<0.01
		Nitrous Oxide	2.07	0.66
		HAP		0.19
11-55 Tanks	DPM Storage Tanks	VOC	12.20	0.80
	TK1	NH <sub>3</sub>	0.20	0.20
	TK2	HAP		0.02
	TK3			
	TK4			
11-55 VPC	Vacuum Pump Condensate	VOC	0.10	0.01
11-55 Com Fug	Fugitives (4)	VOC	0.10	0.40
		NH <sub>3</sub>	0.01	0.01
		HCl	0.01	0.01
		HAP		0.16

Firing Sites

FS-4	Outdoor Firing Site 4
FS-10	Outdoor Firing Site 10
FS-16	Outdoor Firing Site 16
FS-21	Outdoor Firing Site 21
FS-22	Outdoor Firing Site 22
FS-23	Outdoor Firing Site 23
FS-23A	Outdoor Firing Site 23A
FS-23B	Outdoor Firing Site 23B

## 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**
FS-24A	Outdoor Firing Site 24A			
FS-24B	Outdoor Firing Site 24B			
Chamber 11-18				
Chamber 11-38B				
Emissions from All Firing Sites (9)		VOC	131.00	0.76
		PM	97.60	0.51
		NH <sub>3</sub>	1.00	0.02
		CO	716.00	3.65
		Cl <sub>2</sub>	12.00	0.40
		HCl	24.00	0.80
		HCN	1.00	0.02
		HF	23.70	0.20
		Nitrous Oxide	1.00	0.02
		NO <sub>x</sub>	50.10	0.38
		HAP	76.80	1.59

(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) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1

HAP - hazardous air pollutant

PM - particulate matter, suspended in the atmosphere, including PM<sub>10</sub>.

PM<sub>10</sub> - 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 is emitted.

NO<sub>x</sub> - total oxides of nitrogen

SO<sub>3</sub> - sulfur trioxide

CO - carbon monoxide

NH<sub>3</sub> - ammonia

HCl - hydrogen chloride

HCN - hydrogen cyanide

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

## AIR CONTAMINANTS DATA

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

Cl<sub>2</sub> - chlorine

HF - hydrogen fluoride

- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) Combined annual emissions from Building 11-50, Bays 1, 6, and 8.
- (6) Combined annual emissions from Building 11-50, Bays 2, 3, 5, and 7.
- (7) Combined annual emissions from Building 11-50, Vacuum Vents 1, 2, and 3
- (8) Combined annual emissions from Building 11-55, PS1, and PS2.
- (9) Combined hourly and annual emissions from all Firing Sites. The HAP emission rate listed is the total for all HAPs emitted.

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

- \* Emission rates are based on and the facilities are limited by the following maximum operating schedule, per year, per facility until Building 11-50, Bays 1, 6, and 8 start operations:

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

Once Building 11-50, Bays 1, 6, and 8 start operations, the facilities are limited by the following maximum operating schedule, per year, per facility:

16 Hrs/day 7 Days/week 52 Weeks/year or      Hrs/year

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

Dated September 12, 2005