Permit Number 9597

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	Source	Air Contaminant	Emission Rates *	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**
Y-C-1	Furnace F-9180	VOC	0.03	0.12
		PM_{10}	0.04	0.17
		NO _x	0.49	2.15
		CO	0.42	1.81
		SO_2	0.01	0.01
		-		
Y-C-101	Furnace F-91180	VOC	0.04	0.16
		PM ₁₀	0.05	0.22
		NO _x	0.64	2.80
		CO	0.54	2.35
		SO ₂	0.01	0.01
		332	0.01	0.01
Y-C-201	Furnace F-91280	VOC	0.03	0.11
. 0 201	1 41114331 32233	PM ₁₀	0.04	0.15
		NO _x	0.46	2.02
		CO	0.39	1.70
		SO ₂	0.01	0.01
		302	0.01	0.01
Y-C-301	Furnace F-91380	VOC	0.03	0.11
1 0 001	1 4111466 1 31366	PM ₁₀	0.04	0.15
		NO _x	0.46	2.02
		CO	0.39	1.70
		SO_2	0.01	0.01
		302	0.01	0.01
Y-D-1	Flare X-9845	VOC	5.60	11.72
101	1 late X 3043	NO _x	3.97	3.20
		PM_{10}	0.03	0.14
		CO	9.19	15.86
		CO	9.19	13.00
Y-D-201	Flare X-98245	VOC	10.64	11.15
1 5 201	1 Idi C / 30240	NO _x	0.74	1.27
			5.17	±.21

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emissior</u> lb/hr	n Rates * TPY**
		SO₂ CO	0.01 4.90	0.01 7.53
Y-D-2	Flare X-9846	VOC NO _x PM ₁₀ CO	5.00 0.75 40.98 3.86	0.38 3.84 16.92 20.11
Y-D-3	Caustic Scrubber R-9450/946	0 VOC PM ₁₀	0.65 9.80	1.45 17.51
Y-D-203	Caustic Scrubber R-94260	VOC PM ₁₀	0.84 8.58	2.96 19.16
Y-D-4	Lime Scrubber R-94150	VOC PM ₁₀ SiF ₄	0.09 1.40 0.30	0.18 5.24 1.00
Y-D-204	Lime Scrubber R-94250	VOC PM ₁₀ SiF ₄	0.10 1.18 0.46	0.38 5.14 1.06
Y-E-1	Seal Pot D-9102 Vent	VOC	0.02	0.02
Y-E-201	Seal Pot D-91202 Vent	VOC	0.01	0.01
Y-E-2	Oil Scrubbers D-9104/D-9110	VOC PM ₁₀	0.53 3.63	0.91 3.16
Y-E-202	Oil Scrubber D-91204	VOC PM ₁₀	0.40 6.48	0.88 0.96
Y-E-3	Scrubber S-9550	HCI	0.06	0.12
Y-E-303	Scrubber S-9537	HCI	0.06	0.12
Y-E-4	Baghouse SF-9620, SF-9621	PM_{10}	0.02	0.08

Emission Point No. (1)	Source A Name (2)	ir Contaminant Name (3)	<u>Emission</u> lb/hr	Rates * TPY**
Y-E-5	Baghouse B-9420, SF-9420A/B	PM ₁₀	0.10	0.37
Y-E-105	Baghouse B-94120, SF-94120A	B PM ₁₀	0.10	0.37
Y-E-205	Baghouse B-94220, SF-94220A	B PM ₁₀	0.09	0.41
Y-E-305	Baghouse B-94320, SF-94320	PM_{10}	0.09	0.41
Y-E-6	Baghouse B-9440	PM ₁₀	0.38	1.47
Y-E-7	Vent VP-9840	VOC	0.09	0.11
Y-E-207	Vent VP-98240	VOC	0.04	0.17
Y-E-8/Y-E-108	Filters SF-9514/SF-95114	PM ₁₀	0.01	0.01
Y-E-9/Y-E-109	Filters SF-9524/SF-95124	PM ₁₀	0.01	0.01
Y-E-10/Y-E-110	Filters SF-9534/SF-95134	PM ₁₀	0.01	0.01
Y-E-11	Filter SF-9624	PM ₁₀	0.01	0.02
Y-E-12	Filter SF-9610	PM ₁₀	0.01	0.02
Y-E-13	Filter SF-9160	PM ₁₀	0.01	0.01
Y-E-213	Filter SF-91260	PM ₁₀	0.01	0.01
Y-E-14	Vent LE-14	PM ₁₀	3.42	0.37
Y-E-15	Vent LE-7B	VOC	0.01	0.03
Y-E-16/Y-E-116	Vent K-9230/K-92130	PM ₁₀	0.01	0.01
Y-E-216	Vent K-92230	PM ₁₀	0.01	0.01
Y-E-316	Vent K-92330	PM ₁₀	0.01	0.01

Emission		Air Contaminant	Emission Rates *	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**
Y-E-17	Vent VP-9394	VOC	0.04	80.0
		PM_{10}	0.02	0.07
Y-E-17A	VP-9395/VP-9397	VOC	0.04	0.12
	VI 0000/VI 0001	PM_{10}	0.03	0.07
\ = 40\\ = 440			0.45	1.00
Y-E-18/Y-E-118	R-9510/9520/9530/9540 Annulu R-95110/95120/95130/95140/		0.45	1.63
	95150/95160/95170 Annulus			
Y-E-19/Y-E-119	K-9240/K-92140	PM_{10}	0.01	0.01
Y-E-219	K-92240	PM ₁₀	0.01	0.01
1 2 213	K 322-10	1 14110	0.01	0.01
Y-E-319	K-92340	PM_{10}	0.01	0.01
Y-E-20	Filter SF-9655	PM ₁₀	0.01	0.01
Y-E-21	Filter SF-9615	PM_{10}	0.01	0.02
Y-E-22/Y-E-122	Filter SF-9544/SF-95144	PM ₁₀	0.01	0.01
Y-E-23/Y-E-123	Vent K-9511/K-95111	PM ₁₀	0.02	0.03
Y-E-24	Vent K-9521	PM ₁₀	0.01	0.02
Y-E-25	Filter LE-23	VOC	0.03	0.06
Y-E-26	Vent LE-42	VOC	0.01	0.02
Y-E-27	Vent LE-47	VOC	0.01	0.02
Y-E-28	Vent K-9250	PM_{10}	0.01	0.01
Y-E-129	Filter SF-95154	PM ₁₀	0.01	0.01
Y-E-229	Filter SF-95254	PM ₁₀	0.01	0.01
Y-GZ-1	Fugitives (4)	VOC	8.24	36.10
	,	Silane Compounds	3.76	16.51

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr TPY**	
		SiF₄ HCl	0.32 0.26	1.56 0.98
Y-GZ-2	SAF Loading Fugitives (4)	VOC PM ₁₀	0.01 0.94	0.01 0.86
Y-GZ-202	SAF Loading Fugitives (4)	VOC PM ₁₀	0.01 0.56	0.01 0.51
Y-GZ-302	SAF Loading Fugitives (4)	VOC PM ₁₀	0.01 0.56	0.01 0.51
SW-MSS 1	Abrasive Blasting	PM PM ₁₀	1.29 0.15	0.07 0.01
SW-MSS 2	Column	VOC NaOH	0.39 1.32	<0.01 <0.01
SW-MSS 3	Pump/Filter	VOC	0.17	0.02
SW-MSS 4	Exchanger	VOC	4.29	0.38
SW-MSS 5	Tank/Agitator	VOC SiF₄ NaOH	0.50 0.07 0.61	<0.01 0.04 <0.01
SW-MSS 6	Drum/Furnace/Agitator	VOC	2.97	0.02
SW-MSS 7	Baghouse	PM_{10}	1.00	0.10
SW-MSS 8	Welding	PM ₁₀ HAP	0.28 0.02	<0.01 <0.01
SW-MSS 9	Aerosol	VOC	0.85	0.02
SW-MSS 10	Vacuum	VOC	0.14	<0.01
Y-D-1 MSS	Organic Flare	VOC SiH ₄	3.53 0.68	0.04 <0.01

AIR CONTAMINANTS DATA

Emission	Source	Air Contaminant		Emission Rates *	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**	
Y-D-2 MSS	Inorganic Flare	VOC	0.43	<0.01	
Y-D-201 MSS	Organic Flare	VOC	3.57	0.04	
Y-E-404 MSS	Wastewater Holdup Tank	VOC	0.09	0.38	
Y-E-420	Seed Generator SF-96420 Baghouse	PM ₁₀	<0.01	<0.01	
Y-E-421	Seed Generator SF-96421 Baghouse	PM ₁₀	<0.01	<0.01	

- (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

 $\mbox{PM}_{\mbox{\tiny 10}}$ - $\mbox{\ particulate}$ matter equal to or less than 10 microns in diameter.

CO - carbon monoxide HCl - hydrogen chloride

SO₂ - sulfur dioxide

SiF₄ - silicon tetrafluoride

SiH₄ - silane (silicon tetrahydride)

- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- * 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 April 27, 2009