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 PM_{10} NO_x CO SO_2	0.03 0.04 0.49 0.42 0.01	0.12 0.17 2.15 1.81 0.01
Y-C-101	Furnace F-91180	$\begin{array}{c} VOC \\ PM_{10} \\ NO_{x} \\ CO \\ SO_{2} \end{array}$	0.04 0.05 0.64 0.54 0.01	0.16 0.22 2.80 2.35 0.01
Y-C-201	Furnace F-91280	VOC PM_{10} NO_x CO SO_2	0.09 0.04 0.23 0.15 0.01	0.39 0.19 1.01 0.65 0.01
Y-C-301	Furnace F-91380	$\begin{array}{c} VOC \\ PM_{10} \\ NO_{x} \\ CO \\ SO_{2} \end{array}$	0.09 0.04 0.23 0.15 0.01	0.39 0.19 1.01 0.65 0.01
Y-D-1	Organic Flare X-9845	VOC NO_x CO SO_2	3.49 0.28 1.99 0.01	4.15 0.55 3.96 0.01

Emission	Source	Air Contaminant	Emission	Rates *
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**
Y-D-201	Organic Flare X-98245	VOC NO _x	3.54 0.28	4.25 0.57
		CO SO ₂	2.04 0.01	4.14 0.01
Y-D-2	Inorganic Flare X-9846	VOC NO _x	5.00 0.22	0.56 0.81
		PM_{10} CO SO_2	13.25 1.12 0.01	4.99 4.12 0.01
Y-D-3	Caustic Scrubbers R-9450/R-9460	VOC Silane Compounds	0.48 4.58	2.10 20.07
Y-D-203	Caustic Scrubbers R-94260/R-94261	VOC Silane Compounds	0.87 0.91	3.81 3.98
Y-D-4	LUWA Scrubber R-94150	VOC	0.91	0.23
		SiF ₄ Silane Compounds	0.14 0.63	0.60 2.75
Y-D-204	LUWA Scrubber R-94250	VOC SiF₄ Silane Compounds	0.05 0.14 0.63	0.23 0.60 2.75
Y-E-1	Seal Pot D-9102 Vent	VOC	0.01	0.01
Y-E-201	Seal Pot D-91232 Vent	VOC	0.01	0.01
Y-E-2	Oil Scrubbers D-9104/D-91104	VOC PM ₁₀ PM _{2.5}	0.21 1.86 1.86	0.80 0.79 0.79
Y-E-202	Oil Scrubbers	VOC	0.21	0.80

Emission	Source	Air Contaminant	Emission	Rates *
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**
	D-91204/D-91214	PM_{10} $PM_{2.5}$	1.86 1.86	0.79 0.79
Y-E-3	HCl Scrubber S-9550	HCI	0.08	0.34
Y-E-303	HCl Scrubber S-9570	HCI	0.08	0.34
Y-E-4	Baghouse 9600 Area	PM ₁₀ PM _{2.5}	0.01 0.01	0.03 0.03
Y-E-4A	Baghouse 9600 Area	PM ₁₀ PM _{2.5}	0.01 0.01	0.03 0.03
Y-E-5	Baghouse PA-21 Area	PM_{10} $PM_{2.5}$	0.04 0.04	0.17 0.17
Y-E-105	Baghouse PA-22 Area	PM ₁₀ PM _{2.5}	0.05 0.05	0.21 0.21
Y-E-205	Baghouse PA-23 Area	PM ₁₀ PM _{2.5}	0.06 0.06	0.25 0.25
Y-E-206	Baghouse PA-23 Area	PM ₁₀ PM _{2.5}	0.06 0.06	0.25 0.25
Y-E-305	Baghouse PA-24 Area	PM ₁₀ PM _{2.5}	0.06 0.06	0.25 0.25
Y-E-420	Baghouse 9600 Area	PM ₁₀	0.01	0.01
Y-E-421	Baghouse 9600 Area	PM ₁₀	0.01	0.01
Y-E-7	Vent VP-9840/VP-9841	VOC	0.04	0.17

Emission	Source	Air Contaminant	Emission Rates *	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**
Y-E-17	Vent VP-9394	VOC PM ₁₀ PM _{2.5}	0.01 0.01 0.01	0.03 0.02 0.02
Y-E-17A	Vent VP-9395A/VP-9395B	VOC PM ₁₀ PM _{2.5}	0.08 0.01 0.01	0.33 0.02 0.02
Y-E-207	Vent VP-98240/VP-98241	VOC	0.04	0.17
Y-GZ-1	Fugitives (4)	VOC HCI SiF ₄ Silane Compounds	7.97 0.22 0.36 3.76	34.90 0.98 1.56 16.47
Y-GZ-2	SAF Powder Bulk Loading PA-21/PA-22 Fugitives (4)	VOC PM ₁₀	0.01 0.94	0.01 0.86
Y-GZ-202	SAF Powder Bulk Loading PA-23 Fugitives (4)	VOC PM ₁₀	0.01 0.56	0.01 0.51
Y-GZ-302	SAF Powder Bulk Loading PA-24 Fugitives (4)	VOC PM ₁₀	0.01 0.56	0.01 0.51
ABRASMAINT	Abrasive Blasting	PM PM ₁₀	1.29 0.15	0.07 0.01
COLUMNMSS	Column MSS Sitewide	VOC NaOH	0.39 1.32	0.01 0.01
PMP/FILMS	Pump/Filter MSS Sitewide	VOC	0.17	0.02
EXCHMSS	Exchanger MSS Sitewide	VOC	4.29	0.38
TANKMSS	Tank/Agitator MSS Sitewide	VOC	0.50	0.01

Emission	Source	Air Contaminant	Emission Rates *	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**
		SiF₄ NaOH	0.07 0.61	0.04 0.01
DRUMMSS	Drum/Furnace/Agitator MSS Sitewide	VOC	2.97	0.02
BAGHSEMSS	Baghouse MSS Sitewide	PM_{10}	1.00	0.10
WELDMSS	Welding	PM ₁₀ HAP	0.28 0.02	0.01 0.01
AEROSOLMSS	Aerosol MSS Sitewide	VOC	0.85	0.02
VACUUMMSS	Vacuum MSS Sitewide	VOC	0.14	0.01
Y-D-1 MSS	Organic Flare	VOC SiH₄	3.53 0.68	0.04 0.01
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

- (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

PM - particulate matter

 PM_{10} - particulate matter equal to or less than 10 microns in diameter $PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter

NO_x - total oxides of nitrogen

CO - carbon monoxide

SO₂ - sulfur dioxide SiF₄ - silicon tetrafluoride

HCl - hydrogen chloride NaOH - sodium hydroxide

HAP - hazardous air pollutants SiH₄ - silane (silicon tetrahydride)

- (4) Emission rate is an estimate and compliance is demonstrated by meeting the requirements of the applicable special conditions and permit application representations.
- * Emission rates are based on and the facilities are limited by the following maximum operating schedule:

<u>8,760</u> Hrs/year

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

Dated: <u>June 15, 2011</u>