

# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

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.

## AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
Y-C-1	Furnace F-9180	VOC	0.03	0.12
		PM <sub>10</sub>	0.04	0.17
		NO <sub>x</sub>	0.49	2.15
		CO	0.42	1.81
		SO <sub>2</sub>	0.01	0.01
Y-C-101	Furnace F-91180	VOC	0.04	0.16
		PM <sub>10</sub>	0.05	0.22
		NO <sub>x</sub>	0.64	2.80
		CO	0.54	2.35
		SO <sub>2</sub>	0.01	0.01
Y-C-201	Furnace F-91280	VOC	0.03	0.11
		PM <sub>10</sub>	0.04	0.15
		NO <sub>x</sub>	0.46	2.02
		CO	0.39	1.70
		SO <sub>2</sub>	0.01	0.01
Y-C-301	Furnace F-91380	VOC	0.03	0.11
		PM <sub>10</sub>	0.04	0.15
		NO <sub>x</sub>	0.46	2.02
		CO	0.39	1.70
		SO <sub>2</sub>	0.01	0.01
Y-D-1	Flare X-9845	VOC	5.60	11.72
		NO <sub>x</sub>	3.97	3.20
		PM <sub>10</sub>	0.03	0.14
		CO	9.19	15.86
Y-D-201	Flare X-98245	VOC	10.64	11.15
		NO <sub>x</sub>	0.74	1.27
		SO <sub>2</sub>	0.01	0.01
		CO	4.90	7.53

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			lb/hr	TPY**
Y-D-2	Flare X-9846	VOC	5.00	0.38
		NO <sub>x</sub>	0.75	3.84
		PM <sub>10</sub>	40.98	16.92
		CO	3.86	20.11
Y-D-3	Caustic Scrubber R-9450/9460	VOC	0.65	1.45
		PM <sub>10</sub>	9.80	17.51
Y-D-203	Caustic Scrubber R-94260	VOC	0.84	2.96
		PM <sub>10</sub>	8.58	19.16
Y-D-4	Lime Scrubber R-94150	VOC	0.09	0.18
		PM <sub>10</sub>	1.40	5.24
		SiF <sub>4</sub>	0.30	1.00
Y-D-204	Lime Scrubber R-94250	VOC	0.10	0.38
		PM <sub>10</sub>	1.18	5.14
		SiF <sub>4</sub>	0.46	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-91104	VOC	0.53	0.91
		PM <sub>10</sub>	3.63	3.16
Y-E-202	Oil Scrubber D-91204	VOC	0.40	0.88
		PM <sub>10</sub>	6.48	0.96
Y-E-3	Scrubber S-9550	HCl	0.06	0.12
Y-E-303	Scrubber S-9537	HCl	0.06	0.12
Y-E-4	Baghouse SF-9620, SF-9621	PM <sub>10</sub>	0.02	0.08
Y-E-5	Baghouse B-9420, SF-9420A/B	PM <sub>10</sub>	0.10	0.37
Y-E-105	Baghouse B-94120, SF-94120A/B	PM <sub>10</sub>	0.10	0.37

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Y-E-205	Baghouse B-94220, SF-94220A/B	PM <sub>10</sub>	0.09	0.41
Y-E-305	Baghouse B-94320, SF-94320	PM <sub>10</sub>	0.09	0.41
Y-E-6	Baghouse B-9440	PM <sub>10</sub>	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 <sub>10</sub>	0.01	0.01
Y-E-9/Y-E-109	Filters SF-9524/SF-95124	PM <sub>10</sub>	0.01	0.01
Y-E-10/Y-E-110	Filters SF-9534/SF-95134	PM <sub>10</sub>	0.01	0.01
Y-E-11	Filter SF-9624	PM <sub>10</sub>	0.01	0.02
Y-E-12	Filter SF-9610	PM <sub>10</sub>	0.01	0.02
Y-E-13	Filter SF-9160	PM <sub>10</sub>	0.01	0.01
Y-E-213	Filter SF-91260	PM <sub>10</sub>	0.01	0.01
Y-E-14	Vent LE-14	PM <sub>10</sub>	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 <sub>10</sub>	0.01	0.01
Y-E-216	Vent K-92230	PM <sub>10</sub>	0.01	0.01
Y-E-316	Vent K-92330	PM <sub>10</sub>	0.01	0.01
Y-E-17	Vent VP-9394	VOC	0.04	0.08
		PM <sub>10</sub>	0.02	0.07
Y-E-17A	VP-9395/VP-9397	VOC	0.04	0.12
		PM <sub>10</sub>	0.03	0.07
Y-E-18/Y-E-118	R-9510/9520/9530/9540 Annulus	PM <sub>10</sub>	0.45	1.63

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	R-95110/95120/95130/95140/ 95150/95160/95170 Annulus			
Y-E-19/Y-E-119	K-9240/K-92140	PM <sub>10</sub>	0.01	0.01
Y-E-219	K-92240	PM <sub>10</sub>	0.01	0.01
Y-E-319	K-92340	PM <sub>10</sub>	0.01	0.01
Y-E-20	Filter SF-9655	PM <sub>10</sub>	0.01	0.01
Y-E-21	Filter SF-9615	PM <sub>10</sub>	0.01	0.02
Y-E-22/Y-E-122	Filter SF-9544/SF-95144	PM <sub>10</sub>	0.01	0.01
Y-E-23/Y-E-123	Vent K-9511/K-95111	PM <sub>10</sub>	0.02	0.03
Y-E-24	Vent K-9521	PM <sub>10</sub>	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 <sub>10</sub>	0.01	0.01
Y-E-129	Filter SF-95154	PM <sub>10</sub>	0.01	0.01
Y-E-229	Filter SF-95254	PM <sub>10</sub>	0.01	0.01
Y-GZ-1	Fugitives (4)	VOC	8.24	36.10
		Silane Compounds	3.76	16.51
		SiF <sub>4</sub>	0.32	1.56
		HCl	0.26	0.98
Y-GZ-2	SAF Loading Fugitives (4)	VOC	0.01	0.01
		PM <sub>10</sub>	0.94	0.86

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Y-GZ-202	SAF Loading Fugitives (4)	VOC	0.01	0.01
		PM <sub>10</sub>	0.56	0.51
Y-GZ-302	SAF Loading Fugitives (4)	VOC	0.01	0.01
		PM <sub>10</sub>	0.56	0.51
<b>ABRASMAINT</b>	<b>Abrasive Blasting</b>	PM	1.29	0.07
		PM <sub>10</sub>	0.15	0.01
<b>COLUMNMSS</b>	<b>Column MSS Sitewide</b>	VOC	0.39	<0.01
		NaOH	1.32	<0.01
<b>PMP/FILMS</b>	<b>Pump/Filter MSS Sitewide</b>	VOC	0.17	0.02
<b>EXCHMSS</b>	<b>Exchanger MSS Sitewide</b>	VOC	4.29	0.38
<b>TANKMSS</b>	<b>Tank/Agitator MSS Sitewide</b>	VOC	0.50	<0.01
		SiF <sub>4</sub>	0.07	0.04
		NaOH	0.61	<0.01
<b>DRUMMSS</b>	<b>Drum/Furnace/Agitator MSS Sitewide</b>	VOC	2.97	0.02
<b>BAGHSEMSS</b>	<b>Baghouse MSS Sitewide</b>	PM <sub>10</sub>	1.00	0.10
<b>WELDMSS</b>	<b>Welding</b>	PM <sub>10</sub>	0.28	<0.01
		HAP	0.02	<0.01
<b>AEROSOLMSS</b>	<b>Aerosol MSS Sitewide</b>	VOC	0.85	0.02
<b>VACUUMMSS</b>	<b>Vacuum MSS Sitewide</b>	VOC	0.14	<0.01
Y-D-1 MSS	Organic Flare	VOC	3.53	0.04
		SiH <sub>4</sub>	0.68	<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

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Y-E-420	Seed Generator SF-96420 Baghouse	PM <sub>10</sub>	<0.01	<0.01
Y-E-421	Seed Generator SF-96421 Baghouse	PM <sub>10</sub>	<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<sub>x</sub> - total oxides of nitrogen  
 PM - particulate matter  
 PM<sub>10</sub> - particulate matter equal to or less than 10 microns in diameter.  
 CO - carbon monoxide  
 HCl - hydrogen chloride  
 SO<sub>2</sub> - sulfur dioxide  
 NaOH - sodium hydroxide  
 HAP - hazardous air pollutants  
 SiF<sub>4</sub> - silicon tetrafluoride  
 SiH<sub>4</sub> - 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 August 11, 2009