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, sources, and related activities. 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	
			lbs/hour	TPY (4)
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
Y-C-201	Furnace F-91280	VOC	0.03	0.14
		PM_{10}	0.04	0.19
		NO_x	0.21	0.94
		CO	0.15	0.67
		SO_2	0.01	0.01
Y-C-301	Furnace F-91380	VOC	0.03	0.14
		PM_{10}	0.04	0.19
		NO_x	0.21	0.94
		CO	0.15	0.67
		SO_2	0.01	0.01

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Y-D-1	Organic Flare X-9845	VOC	3.49	4.15
		NO_x	0.28	0.55
		CO	1.99	3.96
		SO_2	0.01	0.01
Y-D-201	Organic Flare X-98245	VOC	3.54	4.25
		NO_x	0.28	0.57
		CO	2.04	4.14
		SO_2	0.01	0.01
Y-D-1/Y-D-201	Organic Flare X-9845/Organic Flare X-98245 Annual Caps	VOC		8.40
		NO_x		1.12
		CO		8.10
		SO_2		0.01
Y-D-2	Inorganic Flare X-9846	VOC	5.00	0.56
		NO_x	0.22	0.81
		PM_{10}	13.25	4.99
		CO	1.12	4.12
		SO_2	0.01	0.01
Y-D-3	Caustic Scrubbers R-9450/R-9460	VOC	1.35	-
		Silane Compounds	5.49	-
Y-D-3A	Caustic Scrubbers R-9450/R-9460	VOC	1.35	-
		Silane Compounds	5.49	-
Y-D-203	Caustic Scrubbers R-94260/R-94261	VOC	1.35	-
		Silane Compounds	5.49	-
Y-D-203A	Caustic Scrubbers R-94260/R-94261	VOC	1.35	-
		Silane Compounds	5.49	-

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Y-D-3, Y-D-3A, Y-D-203, Y-D-203A	Caustic Scrubbers R-9450/R-9460, R-94269/R-94261 Annual Caps	VOC		5.91
		Silane Compounds		24.05
Y-D-4	LUWA Scrubber R-94150	VOC	0.05	-
		SiF_4	0.14	-
		Silane Compounds	0.63	-
Y-D-4B	LUWA Scrubber R-94150B	VOC	0.05	-
		SiF_4	0.14	-
		Silane Compounds	0.63	-
Y-D-4, Y-D-4B	LUWA Scrubber R-94150, LUWA Scrubber R-94150B Annual Caps	VOC		0.23
		SiF_4		0.60
		Silane Compounds		2.75
Y-D-204	LUWA Scrubber R-94250,	VOC	0.05	-
		SiF_4	0.14	-
		Silane Compounds	0.63	-
Y-D-204B	LUWA Scrubber R-94250B	VOC	0.05	-
		SiF_4	0.14	-
		Silane Compounds	0.63	-
Y-D-204, Y-D-204B	LUWA Scrubber R-94250, LUWA Scrubber R-94250B Annual Caps	VOC		0.23
		SiF_4		0.60
		Silane Compounds		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 Scrubber D-9104	VOC	0.21	0.79
Y-E-2B	Oil Scrubber D-91104	VOC	0.01	0.01
		PM_{10}	1.86	0.79

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		$PM_{2.5}$	1.86	0.79
Y-E-202	Oil Scrubber D-91204	VOC	0.21	0.79
Y-E-202B	Oil Scrubber D-91214	VOC	0.01	0.01
		PM_{10}	1.86	0.79
		$PM_{2.5}$	1.86	0.79
Y-E-3	HCl Scrubber S-9550	HCl	0.08	0.34
Y-E-303	HCl Scrubber S-9570	HCl	0.08	0.34
Y-E-4	Baghouse 9600 Area	PM_{10}	0.01	0.03
		$PM_{2.5}$	0.01	0.03
Y-E-4A	Baghouse 9600 Area	PM_{10}	0.01	0.03
		$PM_{2.5}$	0.01	0.03
Y-E-5	Baghouse PA-21 Area	PM_{10}	0.04	0.17
		$PM_{2.5}$	0.04	0.17
Y-E-105	Baghouse PA-22 Area	PM_{10}	0.05	0.21
		$PM_{2.5}$	0.05	0.21
Y-E-205	Baghouse PA-23 Area	PM_{10}	0.06	0.25
		$PM_{2.5}$	0.06	0.25
Y-E-206	Baghouse PA-23 Area	PM_{10}	0.06	0.25
		$PM_{2.5}$	0.06	0.25
Y-E-305	Baghouse PA-24 Area	PM_{10}	0.06	0.25
		$PM_{2.5}$	0.06	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	Vacuum Pump VP-9840	SiO_2	0.01	-
Y-E-7B	Vacuum Pump VP-9841	SiO_2	0.01	-

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Y-E-7, Y-E-7B	Vacuum Pumps VP-9840/VP-9841 Annual Caps	SiO_2		0.03
Y-E-17	Vacuum Pump VP-9394	SiO_2	0.01	0.02
Y-E-17A	Vacuum Pumps VP-9395A/VP-9395B	SiO_2	0.01	0.02
Y-E-207	Vacuum Pump VP-98240	SiO_2	0.01	-
Y-E-207B	Vacuum Pump VP-98241	SiO_2	0.01	-
Y-E-207/Y-E-207B	Vacuum Pumps VP-98240/VP-98241 Annual Caps	SiO_2		0.03
Y-GZ-1	Fugitives (5)	VOC	7.97	34.90
		HCl	0.22	0.98
		SiF_4	0.36	1.56
		Silane Compounds	3.76	16.47
Y-GZ-2	SAF Powder Bulk Loading PA-21/PA-22 Fugitives (5)	VOC	0.01	0.01
		PM_{10}	0.94	0.86
Y-GZ-202	SAF Powder Bulk Loading PA-23 Fugitives (5)	VOC	0.01	0.01
		PM_{10}	0.56	0.51
Y-GZ-302	SAF Powder Bulk Loading PA-24 Fugitives (5)	VOC	0.01	0.01
		PM_{10}	0.56	0.51
ABRASMAINT	Abrasive Blasting	PM	1.29	0.07
		PM_{10}	0.15	0.01
AEROSOLMSS	Aerosol MSS Sitewide	VOC	0.85	0.02
BAGHSEMSS	Baghouse MSS Sitewide	PM_{10}	1.08	0.01
COLUMNMSS	Column MSS Sitewide	VOC	0.39	0.01
		NaOH	1.32	0.01
DRUMMSS	Drum/Furnace/Agitator MSS Sitewide	VOC	2.99	0.02
EXCHMSS	Exchanger MSS Sitewide	VOC	4.29	0.38

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TANKMSS	Tank/Agitator MSS Sitewide	VOC	0.50	0.01
		SiF_4	0.07	0.04
		NaOH	0.61	0.01
VACUUMMSS	Vacuum MSS Sitewide	VOC	0.14	0.01
WELDMSS	Welding	PM_{10}	0.28	0.01
		HAP	0.02	0.01
Y-D-1 MSS	Organic Flare X-9845 MSS	VOC	4.00	0.06
		SiO_2	26.90	0.38
Y-D-201 MSS	Organic Flare X-98245 MSS	VOC	4.04	0.06
		SiO_2	27.52	0.39
Y-D-2 MSS	Inorganic Flare X-9846 MSS	VOC	0.43	0.01
		SiO_2	2.56	0.06
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 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
CO - carbon monoxide
NO_x - total oxides of nitrogen
SO_2 - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
PM_{10} - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
SiF_4 - silicon tetrafluoride
SiO_2 - silicon dioxide
HCl - hydrogen chloride
NaOH - sodium hydroxide
HAP - hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C
(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
(5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

Emission Sources - Maximum Allowable Emission Rates

Date: November 9, 2012