

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 5611

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)	<u>Emission Rates *</u>	
			<u>lb/hr</u>	<u>TPY</u>
ST201ST	Hot Oil Heater	NO _x	11.00	47.00
		PM	1.10	4.60
		CO	2.70	11.74
		SO ₂	1.07	4.69
		VOC	0.20	0.94
ST301ST	Regeneration Heater	NO _x	0.09	0.40
		PM	0.01	0.05
		CO	0.02	0.08
		SO ₂	0.01	0.05
		VOC	<0.01	0.03
ST403ST	Superheater	NO _x	22.75	99.65
		PM	2.43	10.62
		CO	1.67	7.31
		SO ₂	0.14	0.60
		VOC	2.38	10.44
ST202ST	"A" Feed Gas Compressor	NO _x	1.45	6.35
		CO	2.18	9.55
		SO ₂	0.05	0.22
		VOC	0.36	1.58
ST203ST	"B" Feed Gas Compressor	NO _x	1.45	6.35
		CO	2.18	9.55
		SO ₂	0.05	0.22
		VOC	0.36	1.58
ST204ST	"C" Feed Gas Compressor	NO _x	1.45	6.35
		CO	2.18	9.55

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			lb/hr	TPY
ST101FL	Styrene Flare	SO ₂	0.05	0.22
		VOC	0.36	1.58
		NO _x	3.40	3.67
		CO	24.50	26.50
		SO ₂	0.70	0.57
		Benzene	1.79	0.33
		VOC (total)	39.46	7.17
		H ₂ S	<0.01	<0.01
ST501FL	Oxygen-Rich Flare	NO _x	0.09	0.38
		CO	0.45	1.94
		SO ₂	0.02	0.06
		VOC	0.62	2.71
ST502FL	Hydrogen-Rich Flare	NO _x	0.33	0.10
		CO	1.67	0.49
		SO ₂	<0.01	0.01
		VOC	0.45	0.07
ST601FL	Loading Flare	NO _x	0.23	0.08
		CO	1.95	0.70
		SO ₂	0.05	<0.01
		VOC	1.30	1.18
ST601LR	Railcar Loading Rack	VOC	2.50	0.46
ST602LR	Truck Loading Rack	VOC	5.90	0.03
ST604LR	Truck Loading Rack	VOC	1.92	0.07
ST605LR	Railcar Loading Rack	VOC	6.10	0.02
FST301FE	300 Area Fugitives (4)	Benzene	0.29	1.27
		VOC (total)	4.83	21.10

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			lb/hr	TPY
		BF ₃	0.12	0.52
FST401FE	400 Area Fugitives (4)	VOC	3.53	15.51
FST501FE	500 Area Fugitives (4)	VOC	1.71	7.53
FST601FE	Loading Fugitives (4)	Benzene	0.03	0.13
		VOC (total)	0.13	0.54
FST701FE	Storage Fugitives (4)	Benzene	0.07	0.30
		VOC (total)	0.90	3.94
FST902FE	Styrene Cooling Tower	VOC	0.76	3.31
ST001WT	Process Drains	VOC	0.27	1.19
ST502ST	TBC System	VOC	1.39	0.02
ST524-B	Tank 524-B	VOC	0.01	0.04
ST710VN	Tank V-10 - CAS	VOC	0.07	<0.01
ST711VN	Tank V-11 - CAS	VOC	0.12	<0.01
ST735TK	Tank V-35	VOC	1.37	1.96
ST737TK	Tank V-37	VOC	14.63	0.98
ST742TK	Tank V-42	VOC	1.91	1.96
EY005FL	Flare (5)			

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

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- (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) NO_x - total oxides of nitrogen
PM - particulate matter
CO - carbon monoxide
 SO_2 - sulfur dioxide
VOC - volatile organic compounds as defined in General Rule 101.1
 H_2S - hydrogen sulfide
 BF_3 - boron trifluoride
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) This Olefins Plant Flare is used as backup for Flare ST101FL.

* Emission rates are based on and the facilities are limited by the following maximum operating schedule:

Hrs/day_____Days/week_____Weeks/year_____ or Hrs/year 8,760

Dated_____