EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 19123

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	Source	Air Contaminant	Emission Rates *	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**
EYPRCSFL	Process Flare - Air Assist (5)	VOC sulfur compounds (as H₂S)	25.00 0.01	
		SO_2	0.17	
		NO_x	6.95	
		CO	14.28	
EY005RFL	Steam Assist Flare (5)	VOC	25.00	_
		sulfur compounds (as H₂S)	0.01	
		SO ₂	0.14	_
		NO_x	2.43	
		CO	17.54	_
ST101RFL	Styrene Flare (5)	VOC	25.00	
		sulfur compounds (as H₂S)	0.01	
		$\overset{-}{SO_2}$	0.16	
		NO_x	2.44	
		CO	17.57	
Total EYPRCSFL,	Process Flare - Air Assist,	VOC	_	18.01
EY005RFL, and ST101RFL	Steam Assist Flare and Styrene Flare (5)	sulfur compounds (as H₂S)	_	0.01
		SO_2		0.14
		NO_x		8.57
		СО		23.57
EYSTOWELFE	Storage Well Fugitives (4)	VOC	0.03	0.15

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission	Source	Air Contaminant	Emission F	Emission Rates *	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**	
EY003LR	Truck Unloading	VOC	0.01	0.01	
EY030CT	North Cooling Tower	VOC	1.00	2.34	
EY901FE	Olefins Fugitives (4)	VOC	5.80	25.00	
UPMAPCOFE	Metering Station Fugitives (4)	VOC	0.10	0.45	
UPMIDKIFFE	Midkiff Injection Pump Fugitives (4)	VOC	0.03	0.12	
UP001LR	Railcar Loading/Unloading	VOC	0.02	0.01	
UP002LR	Truck Loading	VOC	0.05	0.02	
UP010FE	Utilities, Storage and Loading Area Fugitives (4)	VOC	0.88	3.85	
UP011FE	Flare Fugitives (4)	VOC	0.67	2.94	

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

- (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 area name or fugitive source name.
- (3) VOC volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1

H₂S - hydrogen sulfide

SO₂ - sulfur dioxide

NO_x - total oxides of nitrogen

CO - carbon monoxide

- (4) Emission rate is an estimate and compliance is demonstrated by meeting the requirements of the applicable special conditions and permit application representations.
- (5) The Process Flare Air Assist (Emission Point No. [EPN] EYPRCSFL) is the primary flare for the Olefin Unit, but the Steam Assist Flare (EPN EY005RFL) and Styrene Flare (EPN ST101RFL) may each serve as backup.
- * Emission rates are based on and the facilities are based on a continuous operating schedule.
- ** Compliance with annual emission limits is based on a rolling 12-month period.

Dated October 15, 2009

Permits by Rule (PBRs) Consolidated by Reference Permit Number 19123

Note: The following were originally and are still authorized under PBRs as noted, and have been consolidated by reference into this permit.

Best available control technology review has not been conducted on these.

<u>FIN</u>	<u>EPN</u>	Source Name/Description	<u>Date</u>	Authorization	Air Contaminant <u>Name</u> (3)	Emission _lb/hr_	Rates TPY
UPFUG	UPKOCHFE	KOCH Metering Station Fugitives	Dec-98	§106.355	VOC	0.54	2.34
UPMETERIN G	UPKOCHVN	KOCH Metering Station Proving	Dec-98	§106.355	VOC	285.20	0.57
UPMETERIN G	UPMAPCOVN	MAPCO Metering Station Proving	Dec-98	§106.355	VOC	522.32	1.05
UPLAGOON	UPCL2FE	Chlorinator	May-99	§106.532	Chlorine	1.04	0.75