## Permit Number 49154

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

Source	Air Contaminant <u>Emission Rate</u>		on Rates *
Name (2)	Name (3)	lb/hr	TPY**
• •			
FCCU ESP Stack	VOC	5.08	22.25
	$NO_x$	105.98	464.21
	SO <sub>2</sub>	669.90	2430.37
	PM	35.55	155.73
	СО	161.32	706.59
FCCU Charge Heater	VOC	0.22	0.96
	$NO_x$	2.37	10.38
	SO <sub>2</sub>	1.13	1.24
	PM	0.30	1.31
	СО	2.78	12.18
FCCU Fugitives	VOC	7.00	30.65
	Benzene	0.04	0.16
	H₂S	0.03	0.14
Cat. Light Ends Unit	VOC	4.19	18.33
Fugitives	H₂S	0.06	0.25
Alkylation Unit Fugitives	VOC	2.11	9.23
	Hydrogen Fluoride	0.24	1.03
Clay Tower Heater	VOC	0.09	0.39
	$NO_x$	1.49	6.53
	SO <sub>2</sub>	0.43	0.47
	PM	0.12	0.53
	СО	1.05	4.60
Aromex Unit Fugitives	VOC	0.95	4.16
	Benzene	0.42	1.85
Aromex Loading Rack Fugitive	es VOC	14.07	1.88
	Benzene	10.32	1.65
	FCCU ESP Stack  FCCU Charge Heater  FCCU Fugitives  Cat. Light Ends Unit Fugitives  Alkylation Unit Fugitives  Clay Tower Heater  Aromex Unit Fugitives	PCCU ESP Stack  FCCU ESP Stack  VOC  NOx  SO2  PM  CO  FCCU Charge Heater  VOC  NOx  SO2  PM  CO  FCCU Fugitives  VOC  Benzene  H <sub>2</sub> S  Cat. Light Ends Unit Fugitives  Alkylation Unit Fugitives  VOC  Hydrogen Fluoride  Clay Tower Heater  VOC  NOx  SO2  PM  CO  Aromex Unit Fugitives  VOC  Benzene  VOC  NOx  SO2  PM  CO  Aromex Loading Rack Fugitives  VOC  Benzene	Name (2)   Name (3)   Ib/hr

#### AIR CONTAMINANTS DATA

Emission	Source	Air Contaminant	Emission Rates *	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**
	, ,			
14NEASTFLR	Northeast Flare	VOC	14.89	1.58
		NO <sub>x</sub>	1.35	0.11
		CO	10.95	0.91
		Benzene	1.85	1.42
25ARMXSCB	Aromex Unit Solvent Absorber	VOC	0.68	3.00
		Benzene	0.45	1.97
37TANK0321	Storage Tank No. 321	VOC	0.99	1.28
37TK321FUG	Tank No. 321 Fugitives	VOC	0.03	0.11
37TANK0330	Storage Tank No. 330	VOC	0.19	0.32
	ŭ	Benzene	0.19	0.32
37TK330FUG	Tank No. 330 Fugitives	VOC	0.03	0.11
	Ŭ	Benzene	0.03	0.11
06CTR16FUG	Cooling Tower No. 16	VOC	0.36	1.59
11ALKY2CTR	Cooling Tower No. 2	VOC	0.38	1.66
11CTR6FUG	Cooling Tower No. 6	VOC	0.34	1.47

- (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 Section 101.1
  - NO<sub>x</sub> total oxides of nitrogen
  - SO<sub>2</sub> sulfur dioxide
  - PM particulate matter, suspended in the atmosphere, including PM<sub>10</sub>.
  - $PM_{10}$  particulate matter equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no particulate matter greater than 10 microns is emitted.
  - CO carbon monoxide
  - H<sub>2</sub>S hydrogen sulfide
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.

# AIR CONTAMINANTS DATA

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

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

	schedule:		
	Hrs/dayDays/weekWeeks/year or <u>8,760</u> Hrs/year		
**	Compliance with annual emission limits is based on a rolling 12-month p	period.	
		Dated	April 25, 2002
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