EMISSION SOURCES - FINAL EMISSIONS CAPS

Permit Nos. 6308 and PSD-TX-137M1

This table lists the maximum allowable emission caps 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
1, 2	Alky Reboiler	NO_x		
33, 34	BTX Dependanizer Reboiler		NO_x	
35, 36	BTX Rx No. 1 Heater	NO_x		
37, 38	BTX Rx No. 2 Heater	NO_x		
65A	Crude II Charge Heater A		NO_x	
65B	Crude II Vacuum Heater A		NO_x	
66A	Crude II Charge Heater B		NO_x	
66B	Crude II Vacuum Heater B		NO_x	
77	DHDS Charge Heater	NO_x		
69, 70	DIH A Heater	NO_x		
67, 68	DIH B Heater	NO_x		
110	FCCU II Charge Heater	NO_x		
111	FCCU II Scrubber	NO_x		
101, 102	Hydrobon Charge Heater	NO_x		
99, 100	Hydrobon Reboiler	NO_x		
120	Isom DIH Reboiler	NO_x		
74	KHDS Charge Heater	NO_x		
FL-118	Marine VRU	NO_x		
3	MFP Rx No. 1 Heater	NO_x		
4A	MFP Rx No. 2 Heater	NO_x		
4	MFP Stabilizer Reboiler		NO_x	
25	Sulfolane Heater	NO_x		
80	VGO Charge Heater	NO_x		
81	VGO Fractionator Heater		NO_x	
	Emissions Cap	NO_x	411.7	1519.1
1, 2	Alky Reboiler	CO		
33, 34	BTX Dependanizer Reboiler		CO	
35, 36	BTX Rx No. 1 Heater	CO		
37, 38	BTX Rx No. 2 Heater	CO		

EMISSION SOURCES - FINAL EMISSION CAPS

AIR CONTAMINANTS DATA

Emission Point No. (1) *	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr	TPY
65A	Crude II Charge Heater A	CO		
65B	Crude II Vacuum Heater A	CO		
66A	Crude II Charge Heater B	CO		
66B	Crude II Vacuum Heater B	CO		
77	DHDS Charge Heater	CO		
69, 70	DIH A Heater	CO		
67, 68	DIH B Heater	CO		
110	FCCU II Charge Heater	CO		
111	FCCU II Scrubber	CO		
101, 102	Hydrobon Charge Heater	CO		
99, 100	Hydrobon Reboiler	CO		
120	Isom DIH Reboiler	CO		
74	KHDS Charge Heater	CO		
FL-118	Marine VRU	CO		
3	MFP Rx No. 1 Heater	CO		
4A	MFP Rx No. 2 Heater	CO		
4	MFP Stabilizer Reboiler	CO		
25	Sulfolane Heater	CO		
80	VGO Charge Heater	CO		
81	VGO Fractionator Heater	CO		
	Emissions Cap	CO	278.2	530.9
1, 2	Alky Reboiler	SO_2		
33, 34	BTX Depentanizer Reboiler	SO_2		
35, 36	BTX Rx No. 1 Heater	SO_2		
37, 38	BTX Rx No. 2 Heater	SO_2		
65A	Crude II Charge Heater A	SO_2		
65B	Crude II Vacuum Heater A	SO_2		
66A	Crude II Charge Heater B	SO_2		
66B	Crude II Vacuum Heater B	SO_2		
77	DHDS Charge Heater	SO_2		
69, 70	DIH A Heater	SO_2		
67, 68	DIH B Heater	SO_2		
110	FCCU II Charge Heater	SO_2		
111	FCCU II Scrubber	SO_2		
101, 102	Hydrobon Charge Heater	SO_2		

EMISSION SOURCES - FINAL EMISSION CAPS

Emission Point No. (1)	Source Name (2)	AIR CONTAMINANTS DATA Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
99, 100	Hydrobon Reboiler	SO_2		
120	Isom DIH Reboiler	SO_2		
74	KHDS Charge Heater	SO_2		
3	MFP Rx No. 1 Heater	SO_2		
4A	MFP Rx No. 2 Heater	SO_2		
4	MFP Stabilizer Reboiler	SO_2		
25	Sulfolane Heater	SO_2		
80	VGO Charge Heater	SO_2		
81	VGO Fractionator Heater	SO_2		
	Emissions Cap	SO_2	262.0	499.3
1, 2	Alky Reboiler	PM		
33, 34	BTX Depentanizer Reboiler	PM		
35, 36	BTX Rx No. 1 Heater	PM		
37, 38	BTX Rx No. 2 Heater	PM		
65A	Crude II Charge Heater A	PM		
65B	Crude II Vacuum Heater A	PM		
66A	Crude II Charge Heater B	PM		
66B	Crude II Vacuum Heater B	PM		
77	DHDS Charge Heater	PM		
69, 70	DIH A Heater	PM		
67, 68	DIH B Heater	PM		
110	FCCU II Charge Heater	PM		
111	FCCU II Scrubber	PM		
101, 102	Hydrobon Charge Heater	PM		
99, 100	Hydrobon Reboiler	PM		
120	Isom DIH Reboiler	PM		
74	KHDS Charge Heater	PM		
3	MFP Rx No. 1 Heater	PM		
4A	MFP Rx No. 2 Heater	PM		
4	MFP Stabilizer Reboiler	PM		
25	Sulfolane Heater	PM		
80	VGO Charge Heater	PM		
81	VGO Fractionator Heater	PM		

EMISSION SOURCES - FINAL EMISSION CAPS

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
	Emissions Cap	PM	57.1	220.5
E14T505	Aerobic Digester (E14TK202,E14T203, and E14TK527)	VOC		
1, 2	Alky Reboiler	VOC		
C-103	Alkylation Cooling Tower	VOC		
F-50	Alkylation Fugitives (4)	VOC		
F-200	Benzene Tank Piping Fugitives (4)	VOC		
C-108	BTX Cooling Tower	VOC		
33, 34	BTX Depentanizer Reboiler	VOC		
F-55	BTX Fugitives (4)	VOC		
35, 36	BTX Rx No. 1 Heater	VOC		
37, 38	BTX Rx No. 2 Heater	VOC		
F-58	Butadiene Saturation Fugitives (4)	VOC		
C-106	Crude I Cooling Tower	VOC		
C-109	Crude II Cooling Tower	VOC		
65A	Crude II Charge Heater A	VOC		
65B	Crude II Vacuum Heater A	VOC		
66A	Crude II Charge Heater B	VOC		
66B	Crude II Vacuum Heater B	VOC		
F-61	Crude II/DIH Fugitives (4)	VOC		
F-124	Cyclohexane Fugitives (4)	VOC		
77	DHDS Charge Heater	VOC		
69, 70	DIH A Heater	VOC		
67, 68	DIH B Heater	VOC		
F-DIM	Dimersol Fugitives (4)	VOC		
C-105	FCCU I Cooling Tower	VOC		
C-113	FCCU II Cooling Tower	VOC		
110	FCCU II Charge Heater	VOC		
111	FCCU II Scrubber	VOC		
F-112	FCCU II Fugitives (4)	VOC		

EMISSION SOURCES - FINAL EMISSION CAPS

		AIR CONTAMINANTS DATA	
Emission Point No. (1) *	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr	TPY
F-44	FCCU I Fugitives (4)	VOC		
F-202	Gas Blending Fugitives (4)		VOC	
101, 102	Hydrobon Charge Heater	VOC		
C-110	Hydrobon Cooling Tower	VOC		
99, 100	Hydrobon Reboiler	VOC		
F-98	Hydrobon Fugitives (4)	VOC		
120	Isom DIH Reboiler	VOC		
F-121	Isom Fugitives (4)	VOC		
F-79	Isomax Fugitives (4)	VOC		
74	KHDS Charge Heater	VOC		
F-72	KHDS/DHDS Fugitives (4)		VOC	
FL-118	Marine VRU	VOC		
C-104	MFP Cooling Tower	VOC		
3	MFP Rx No. 1 Heater	VOC		
4A	MFP Rx No. 2 Heater	VOC		
4	MFP Stabilizer Reboiler		VOC	
F-48	MFP Fugitives (4)	VOC		
F-123	MTBE Fugitives (4)	VOC		
20-J-1	Recovery Column Vacuum Jet Vent		VOC	
S-84	SRU Incinerator (E10TK105,E29TK111, and E29T211)	VOC		
C-107	Sulfolane Cooling Tower		VOC	
25	Sulfolane Heater	VOC		
F-53	Sulfolane Fugitives (4)		VOC	
CAT	Tank CAT	VOC		
J-1	Tank J-1	VOC		
J-2	Tank J-2	VOC		
E033OT101	Tank E033OT101	VOC		
E10TK101	Tank E10TK101	VOC		
E11TKR5	Tank E11TKR5	VOC		
E11TKR7	Tank E11TKR7	VOC		
E11TKR9	Tank E11TKR9	VOC		

EMISSION SOURCES - FINAL EMISSION CAPS

		AIR CONTAMINANTS DATA	
Emission Point No. (1) *	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hrTPY
E11TKR11	Tank E11TKR11	VOC	
E11TKR16	Tank E11TKR16	VOC	
E11TKR17	Tank E11TKR17	VOC	
E11TKR18	Tank E11TKR18	VOC	
E11TKR19	Tank E11TKR19	VOC	
E11TKR20	Tank E11TKR20	VOC	
E11TKR34	Tank E11TKR34	VOC	
E11TKR36	Tank E11TKR36	VOC	
E11TKR40	Tank E11TKR40	VOC	
E11TKS1	Tank E11TKS1	VOC	
E11TKS2	Tank E11TKS2	VOC	
E11TKS3	Tank E11TKS3	VOC	
E11TKS4	Tank E11TKS4	VOC	
E11TKS5	Tank E11TKS5	VOC	
E11TKS6	Tank E11TKS6	VOC	
E11TKS7	Tank E11TKS7	VOC	
E11TKS8	Tank E11TKS8	VOC	
E11TKS21	Tank E11TKS21	VOC	
E11TKS22	Tank E11TKS22	VOC	
E11TKS23	Tank E11TKS23	VOC	
E11TKS30	Tank E11TKS30	VOC	
E11TKS31	Tank E11TKS31	VOC	
E11TKS32	Tank E11TKS32	VOC	
E11TKS41	Tank E11TKS41	VOC	
E11TKS42	Tank E11TKS42	VOC	
E11TKS43	Tank E11TKS43	VOC	
E11TK319	Tank E11TK319	VOC	
E11TK320	Tank E11TK320	VOC	
E11TK321	Tank E11TK321	VOC	
E11TK322	Tank E11TK322	VOC	
E11TK323	Tank E11TK323	VOC	
E11TK324	Tank E11TK324	VOC	
E11TK327	Tank E11TK327	VOC	
E11TK328	Tank E11TK328	VOC	

EMISSION SOURCES - FINAL EMISSION CAPS

		AIR CONTAMINANTS DATA	
Emission Point No. (1) *	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hrTPY
E12TK52	Tank E12TK52	VOC	
E12TK113	Tank E12TK113	VOC	
E12TK114	Tank E12TK114	VOC	
E12TK115	Tank E12TK115	VOC	
E12TK117	Tank E12TK117	VOC	
E12TK145	Tank E12TK145	VOC	
E12TK146	Tank E12TK146	VOC	
E13TKE4	Tank TK13E4	VOC	
E13TKE5	Tank TK13E5	VOC	
E13TKS25	Tank E13TKS25	VOC	
E13TKS26	Tank E13TKS26	VOC	
E13TKS27	Tank E13TKS27	VOC	
E13TKS33	Tank E13TKS33	VOC	
E13TKS34	Tank E13TKS34	VOC	
E13TKS35	Tank E13TKS35	VOC	
E13TK11	Tank E13TK11	VOC	
E13TK12	Tank E13TK12	VOC	
E13TK36	Tank E13TK36	VOC	
E13TK37	Tank E13TK37	VOC	
E13TK38	Tank E13TK38	VOC	
E14TK526	Tank E14TK526	VOC	
E18TKCS3	Tank E18TKCS3	VOC	
E18TK100	Tank E18TK100	VOC	
E18TK101	Tank E18TK101	VOC	
E18TK102	Tank E18TK102	VOC	
E18TK103	Tank E18TK103	VOC	
E18TK107	Tank E18TK107	VOC	
E18TK108	Tank E18TK108	VOC	
E18TK110	Tank E18TK110	VOC	
E18TK109	Tank E18TK109	VOC	
E18TK112	Tank E18TK112	VOC	
E18TK121	Tank E18TK121	VOC	
E18TK122	Tank E18TK122	VOC	
E18TK123	Tank E18TK123	VOC	

EMISSION SOURCES - FINAL EMISSION CAPS

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
		AIR CONTAMINANTS DATA		
E18TK125	Tank E18TK125	VOC		
E18TK140	Tank E18TK140	VOC		
E18TK141	Tank E18TK141	VOC		
E18TK143	Tank E18TK143	VOC		
E18TK144	Tank E18TK144	VOC		
E18TK160	Tank E18TK160	VOC		
E18TK161	Tank E18TK161	VOC		
E18TK421	Tank E18TK421	VOC		
E18TK422	Tank E18TK422	VOC		
E18TK423	Tank E18TK423	VOC		
E18TK424	Tank E18TK424	VOC		
E18TK426	Tank E18TK426	VOC		
E18TKF3	Tank E18TKF3	VOC		
E20V21A	Tank E20V21A	VOC		
E20V21B	Tank E20V21B	VOC		
E20V22	Tank E20V22	VOC		
E20V4	Tank E20V4	VOC		
E29T111	Tank E29T111	VOC		
E29T411	Tank E29T411	VOC		
E29T511	Tank E29T511	VOC		
F-140	Tank 140 Fugitives	VOC		
F-26	Terminal No. 2 Fugitives (4)	VOC		
F-30	Terminal No. 3 Fugitives (4)	VOC		
71	Vapor Recovery Unit (E18TK55, E18TK141)	VOC		
80	VGO Charge Heater	VOC		
81	VGO Fractionator Heater	VOC		
92	Xylene Loading	VOC		
	Emissions Cap	VOC	843.73	729.23
E11TKS23	Tank E11TKS23	Toluene		
E11TKR17	Tank E11TKR17	Toluene		
E11TKR18	Tank E11TKR18	Toluene		
	Emissions Cap	Toluene	0.96	2.53

EMISSION SOURCES - FINAL EMISSION CAPS

E11TKS32	Tank E11TKS32	Xylene		
E11TKR9	Tank E11TKR9	Xylene		
E11TKR11	Tank E11TKR11	Xylene		
	Emissions Cap	Xylene	11.92	13.06
E11TKS22	Tank E11TKS22	Benzene		
E11TKR5	Tank E11TKR5	Benzene		
E11TKR7	Tank E11TKR7	Benzene		
	Emissions Cap	Benzene	1.34	2.77
E11TKS21	Tank E11TKS21	Cyclohexane		
E11TKR34	Tank E11TKR34	Cyclohexane		
E11TKR40	Tank E11TKR40	Cyclohexane		
	Emissions Cap	Cyclohexane	0.86	2.94
E12TK146	Tank E12TK146	MTBE		
E18TK125	Tank E18TK125	MTBE		
	Emissions Cap	MTBE	2.11	4.28

(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 30 Texas Administrative Code Section 101.1
NO_x - total oxides of nitrogen
SO_2 - sulfur dioxide
PM - particulate matter
CO - carbon monoxide
MTBE - methyl-tert-butyl ether
(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:

EMISSION SOURCES - FINAL EMISSION CAPS

_____ Hrs/day _____ Days/week _____ Weeks/year or 8,760 Hrs/year

Dated ___