

EMISSION SOURCES - INITIAL EMISSION CAPS

Permit No. 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
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		
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		
80	VGO Charge Heater	NO _x		
81	VGO Fractionator Heater	NO _x		
74	KHDS Charge Heater	NO _x		
77	DHDS Charge Heater	NO _x		
35, 36	BTX Rx No. 1 Heater	NO _x		
37, 38	BTX Rx No. 2 Heater	NO _x		
33, 34	BTX Depentanizer Reboiler	NO _x		
3	MFP Rx No. 1 Heater	NO _x		
4A	MFP Rx No. 2 Heater	NO _x		
4	MFP Stabilizer Reboiler	NO _x		
120	Isom DIH Reboiler	NO _x		
1, 2	Alky Reboiler	NO _x		
25	Sulfolane Heater	NO _x		
FL-118	Marine VRU	NO _x		
	Emissions Cap	NO _x	650.8	2374.0
65A	Crude II Charge Heater A	CO		
65B	Crude II Vacuum Heater A	CO		
66A	Crude II Charge Heater B	CO		

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
66B	Crude II Vacuum Heater B	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		
80	VGO Charge Heater	CO		
81	VGO Fractionator Heater	CO		
74	KHDS Charge Heater	CO		
77	DHDS Charge Heater	CO		
35, 36	BTX Rx No. 1 Heater	CO		
37, 38	BTX Rx No. 2 Heater	CO		
33, 34	BTX Depentanizer Reboiler	CO		
3	MFP Rx No. 1 Heater	CO		
4A	MFP Rx No. 2 Heater	CO		
4	MFP Stabilizer Reboiler	CO		
120	Isom DIH Reboiler	CO		
1, 2	Alky Reboiler	CO		
25	Sulfolane Heater	CO		
FL-118	Marine VRU	CO		
	Emissions Cap	CO	245.3	984.0
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		
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		
99, 100	Hydrobon Reboiler	SO ₂		
80	VGO Charge Heater	SO ₂		
81	VGO Fractionator Heater	SO ₂		
74	KHDS Charge Heater	SO ₂		

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			<u>lb/hr</u>	<u>TPY</u>
77	DHDS Charge Heater	SO ₂		
35, 36	BTX Rx No. 1 Heater	SO ₂		
37, 38	BTX Rx No. 2 Heater	SO ₂		
33, 34	BTX Depentanizer Reboiler	SO ₂		
3	MFP Rx No. 1 Heater	SO ₂		
4A	MFP Rx No. 2 Heater	SO ₂		
4	MFP Stabilizer Reboiler	SO ₂		
120	Isom DIH Reboiler	SO ₂		
1, 2	Alky Reboiler	SO ₂		
25	Sulfolane Heater	SO ₂		
	Emissions Cap	SO ₂	283	1223.1
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		
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		
80	VGO Charge Heater	PM		
81	VGO Fractionator Heater	PM		
74	KHDS Charge Heater	PM		
77	DHDS Charge Heater	PM		
35, 36	BTX Rx No. 1 Heater	PM		
37, 38	BTX Rx No. 2 Heater	PM		
33, 34	BTX Depentanizer Reboiler	PM		
3	MFP Rx No. 1 Heater	PM		
4A	MFP Rx No. 2 Heater	PM		
4	MFP Stabilizer Reboiler	PM		
120	Isom DIH Reboiler	PM		
1, 2	Alky Reboiler	PM		
25	Sulfolane Heater	PM		

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates *</u>	
			<u>lb/hr</u>	<u>TPY</u>
	Emissions Cap	PM	51.9	226.1
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		
69, 70	DIH A Heater	VOC		
67, 68	DIH B Heater	VOC		
F-61	Crude II/DIH Fugitives	VOC		
110	FCCU II Charge Heater	VOC		
111	FCCU II Scrubber	VOC		
F-112	FCCU II Fugitives	VOC		
F-44	FCCU I Fugitives	VOC		
101, 102	Hydrobon Charge Heater	VOC		
99, 100	Hydrobon Reboiler	VOC		
F-98	Hydrobon Fugitives	VOC		
80	VGO Charge Heater	VOC		
81	VGO Fractionator Heater	VOC		
F-79	Isomax Fugitives	VOC		
74	KHDS Charge Heater	VOC		
77	DHDS Charge Heater	VOC		
F-72	KHDS/DHDS Fugitives	VOC		
35, 36	BTX Rx No. 1 Heater	VOC		
37, 38	BTX Rx No. 2 Heater	VOC		
33, 34	BTX Depentanizer Reboiler	VOC		
F-55	BTX Fugitives	VOC		
3	MFP Rx No. 1 Heater	VOC		
4A	MFP Rx No. 2 Heater	VOC		
4	MFP Stabilizer Reboiler	VOC		
F-48	MFP Fugitives	VOC		
120	Isom DIH Reboiler	VOC		
F-121	Isom Fugitives	VOC		
1, 2	Alky Reboiler	VOC		
F-50	Alkylation Fugitives	VOC		
25	Sulfolane Heater	VOC		
F-53	Sulfolane Fugitives	VOC		

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates *</u>	
			<u>lb/hr</u>	<u>TPY</u>
F-58	Butadiene Saturation Fugitives	VOC		
F-124	Cyclohexane Fugitives	VOC		
F-123	MTBE Fugitives	VOC		
F-DIM	Dimersol Fugitives	VOC		
F-200	Benzene Tank Piping Fugitives	VOC		
F-26	Terminal No. 2 Fugitives	VOC		
F-30	Terminal No. 3 Fugitives	VOC		
F-202	Gas Blending Fugitives	VOC		
FL-118	Marine VRU	VOC		
92	Xylene Loading	VOC		
C-103	Alkylation Cooling Tower	VOC		
C-104	MFP Cooling Tower	VOC		
C-105	FCCU I Cooling Tower	VOC		
C-106	Crude I Cooling Tower	VOC		
C-107	Sulfolane Cooling Tower	VOC		
C-108	BTX Cooling Tower	VOC		
C-109	Crude II Cooling Tower	VOC		
C-113	FCCU II Cooling Tower	VOC		
T-S2	Tank S2	VOC		
T-S3	Tank S3	VOC		
T-S25	Tank S25	VOC		
T-S43	Tank S43	VOC		
T-R19	Tank R19	VOC		
T-R20	Tank R20	VOC		
T-320	Tank 320	VOC		
T-321	Tank 321	VOC		
T-101	Tank 101	VOC		
T-102	Tank 101	VOC		
T-103	Tank 103	VOC		
T-107	Tank 107	VOC		
T-108	Tank 108	VOC		
T-109	Tank 109	VOC		
T-125	Tank 125	VOC		
T-F3	Tank F3	VOC		
T-J1	Tank J1	VOC		
T-J2	Tank J2	VOC		

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates *</u>	
			<u>lb/hr</u>	<u>TPY</u>
T-S23	Tank S23	VOC		
T-R17	Tank R17	VOC		
T-R18	Tank R18	VOC		
T-S32	Tank S32	VOC		
T-R9	Tank R9	VOC		
T-R11	Tank R11	VOC		
T-S1	Tank S1	VOC		
T-S5	Tank S5	VOC		
T-S8	Tank S8	VOC		
T-S41	Tank S41	VOC		
T-S42	Tank S42	VOC		
T-113	Tank 113	VOC		
T-114	Tank 114	VOC		
T-115	Tank 115	VOC		
T-117	Tank 117	VOC		
T-S6	Tank S6	VOC		
T-S7	Tank S7	VOC		
T-S30	Tank S30	VOC		
T-S31	Tank S31	VOC		
T-144	Tank 144	VOC		
T-322	Tank 322	VOC		
T-324	Tank 324	VOC		
T-328	Tank 328	VOC		
T-160	Tank 160	VOC		
T-S33	Tank S33	VOC		
T-145	Tank 145	VOC		
T-146	Tank 146	VOC		
T-S22	Tank S22	VOC		
T-R5	Tank R5	VOC		
T-R7	Tank R7	VOC		
T-S21	Tank S21	VOC		
T-R34	Tank R34	VOC		
T-R40	Tank R40	VOC		
T-323	Tank 323	VOC		
T-R36	Tank R36	VOC		
T-421	Tank 421	VOC		

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates *</u>	
			<u>lb/hr</u>	<u>TPY</u>
T-423	Tank 423	VOC		
T-100	Tank 100	VOC		
T-142	Tank 142	VOC		
T-143	Tank 143	VOC		
T-S26	Tank S26	VOC		
T-S27	Tank S27	VOC		
T-S34	Tank S34	VOC		
T-111	Tank 111	VOC		
T-112	Tank 112	VOC		
	Emissions Cap	VOC	626.5	1138.8
T-S23	Tank S23	Toluene		
T-R17	Tank R17	Toluene		
T-R18	Tank R18	Toluene		
	Emissions Cap	Toluene	21.56	29.58
T-S32	Tank S32	Xylene		
T-R9	Tank R9	Xylene		
T-R11	Tank R11	Xylene		
	Emissions Cap	Xylene	19.6	14.1
T-S22	Tank S22	Benzene		
T-R5	Tank R5	Benzene		
T-R7	Tank R7	Benzene		
	Emissions Cap	Benzene	1.23	1.68
T-S21	Tank S21	Cyclohexane		
T-R34	Tank R34	Cyclohexane		
T-R40	Tank R40	Cyclohexane		
	Emissions Cap	Cyclohexane	0.64	2.56
T-145	Tank 145	MTBE		
T-146	Tank 146	MTBE		
	Emissions Cap	MTBE	1.26	2.08

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			lb/hr	TPY

- (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 General Rule 101.1
 - NO_x - total oxides of nitrogen
 - SO₂ - 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:

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

Dated 8-8-95