#### Flexible Permit Numbers 2937 and PSD-TX-1023

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.

(See Attachment I for Source Name and Emission Point Number Index)

#### AIR CONTAMINANTS DATA

Air Contaminant

	_	Name (1)	lb/hr	TPY**
SO <sub>2</sub> CAPS:				
Prior to establishing Special Conditions:	$C_{PM}$ pursuant to the Fluid Cataly	rtic Cracking	Unit (FCCU)	section of the
Initial Emissions Cap	Phase 0 without EPN 12-CO STK	SO <sub>2</sub>	763.7	3345.1
Interim Emissions Cap	Phase 1 without EPN 12-CO STK	SO <sub>2</sub>	131.9	577.6
Interim Emissions Cap	Phase 2 without EPN 12-CO STK	SO <sub>2</sub>	132.2	579.0
Final Emissions Cap	Phase 3 without EPN 12-CO STK	SO <sub>2</sub>	160.6	703.7
EPN 12-CO STK	F.C.C.U., CO BOILER, and E.S.P Phase 0 through Phase 2	SO <sub>2</sub>	594.5	2003.0
EPN 12-CO STK	F.C.C.U., CO BOILER, and E.S.P. Phase 3	SO <sub>2</sub>	211.1	924.5
After establishing $C_{PN}$	$_{ m I}$ pursuant to the FCCU section $_{ m O}$	f the Special	Conditions:	
Initial Emissions Cap	Phase 0	SO <sub>2</sub>	1358.2	5348.1
Interim Emissions Cap	Phase 1	SO <sub>2</sub>	726.4	2580.6
Interim Emissions Cap	Phase 2	SO <sub>2</sub>	726.7	2582.0
Final Emissions Cap	Phase 3	$SO_2$	371.7	1628.2

Air Contaminant	Emission Rates *		
Name (1)	lb/hr	TPY**	

		Air Contaminant	Emissi	ion Rates *
		Name (1)	lb/hr	TPY**
VOC CAPS:				
Prior to establishing (	$C_{PM}$ pursuant to the FCCU secti	on of the Special C	onditions:	
Initial Emissions Cap	Phase 0 without EPN 12-CO ST	K VOC	5592.6	1784.2
Interim Emissions Cap	Phase 1 without EPN 12-CO ST	K VOC	2069.1	1121.9
Interim Emissions Cap	Phase 2 without EPN 12-CO ST	K VOC	1830.2	1165.6
Final Emissions Cap	Phase 3 without EPN 12-CO ST	K VOC	2045.1	1239.2
EPN 12-CO STK	F.C.C.U., CO BOILER, and E.S	P VOC	4.8	21.2
After establishing C <sub>PN</sub>	pursuant to the FCCU section	of the Special Con	ditions:	
Initial Emissions Cap	Phase 0	VOC	5597.4	1805.4
Interim Emissions Cap	Phase 1	VOC	2073.9	1143.1
Interim Emissions Cap	Phase 2	VOC	1835.0	1186.8
Final Emissions Cap	Phase 3	VOC	2049.9	1260.4
NO <sub>x</sub> CAPS:				
Prior to establishing (	$C_{PM}$ pursuant to the FCCU secti	on of the Special C	onditions:	
Initial Emissions Cap	Phase 0	NO <sub>x</sub>	739.1	2932.5
Interim Emissions Cap	Phase 1	NO <sub>x</sub>	759.2	2932.9
Interim Emissions Cap	Phase 2	NO <sub>x</sub>	760.5	2938.4
Final Emissions Cap	Phase 3	NO <sub>x</sub>	326.2	1334.5

	A	Air Contaminant Name (1)	<u>Emissi</u> lb/hr	ion Rates * TPY**
12-CO STK	F.C.C.U., CO BOILER, and E.S.P. Phase 0 through Phase 2	NO <sub>x</sub>	279.4	941.3
12-CO STK	F.C.C.U., CO BOILER, and E.S.F Phase 3	P. NO <sub>x</sub>	101.1	443.0
After establishing C <sub>PN</sub>	$_{\scriptscriptstyle 0}$ pursuant to the FCCU section	of the Special Condi	tions:	
Initial Emissions Cap	Phase 0	NO <sub>x</sub>	739.1	2932.5
Interim Emissions Cap	Phase 1	NO <sub>x</sub>	759.2	2932.9
Interim Emissions Cap	Phase 2	NO <sub>x</sub>	760.5	2938.4
Final Emissions Cap	Phase 3	NO <sub>x</sub>	326.2	1334.5
CO CAPS:				
Prior to establishing	$C_{PM}$ pursuant to the FCCU section	on of the Special Cor	nditions:	
Initial Emissions Cap	Phase 0 without EPN 12-CO STR	CO	314.0	1363.4
Interim Emissions Cap	Phase 1 without EPN 12-CO STR	CO	331.4	1391.8
Interim Emissions Cap	Phase 2 without EPN 12-CO STR	CO	332.6	1397.2
Final Emissions Cap	Phase 3 without EPN 12-CO STR	CO	332.8	1407.6
EPN 12-CO STK	F.C.C.U., CO BOILER, and E.S.	P. CO	153.9	134.8
After establishing C <sub>PN</sub>	$_{ extsf{ iny 0}}$ pursuant to the FCCU section	of the Special Condi	tions:	
Initial Emissions Cap	Phase 0	СО	467.9	1498.2
Interim Emissions Cap Interim Emissions Cap		CO CO	485.3 486.5	1526.7 1532.1

#### AIR CONTAMINANTS DATA

		Air	Contaminant	Emiss	ion Rates *
			Name (1)	lb/hr	TPY**
Final Emissions Cap	Phase 3		СО	486.7	1542.4
PM CAPS:					
Prior to establishing	$C_{PM}$ pursuant to the FCCU sec	ction	of the Special Co	nditions:	
Initial Emissions Cap	Phase 0 without EPN 12-CO-S	STK	PM	65.2	327.7
Interim Emissions Cap	Phase 1 without EPN 12-CO-S	STK	PM	68.1	335.8
Interim Emissions Cap	Phase 2 without EPN 12-CO-S	STK	PM	68.2	336.3
Final Emissions Cap	Phase 3 without EPN 12-CO-S	STK	PM	47.7	178.1
12-CO-STK	F.C.C.U., CO BOILER, and E.	S.P.	PM	38.3	167.6
After establishing C <sub>P</sub>	տ pursuant to the FCCU sectio	on of	the Special Condi	itions:	
Initial Emissions Cap	Phase 0		PM	103.5	327.7+C <sub>PM</sub>
Interim Emissions Cap	Phase 1		PM	106.4	335.8+C <sub>PM</sub>
Interim Emissions Cap	Phase 2		PM	106.5	336.3+C <sub>PM</sub>
Final Emissions Cap	Phase 3		PM	86.0	178.1+C <sub>PM</sub>
H <sub>2</sub> SO <sub>4</sub> CAPS:					
Prior to establishing	$C_{\mathtt{AM}}$ pursuant to the FCCU sec	ction	of the Special Co	nditions:	
Final Emissions Cap	Phase 0 to 3		H <sub>2</sub> SO <sub>4</sub>	19.1	83.8
After establishing C <sub>A</sub>	տ pursuant to the FCCU sectio	on of	the Special Cond	itions:	
Final Emissions Cap	Phase 0 to 3		H <sub>2</sub> SO <sub>4</sub>	19.1	$C_AM$

#### H<sub>2</sub>S CAPS:

		Air Contaminant Name (1)	<u>Emissi</u>	on Rates * TPY**
		Name (1)	10/111	<u>IFI</u>
Initial Emissions Cap	Phase 0	H₂S	10.50	46.10
Interim Emissions Cap	Phase 1	H₂S	2.42	10.57
Interim Emissions Cap	Phase 2	H₂S	2.42	10.57
Final Emissions Cap	Phase 3	H₂S	2.83	12.33
NH₃ CAPS:				
Initial Emissions Cap	Phase 0	$NH_3$	2.21	9.70
Interim Emissions Cap	Phase 1	$NH_3$	0.21	0.90
Interim Emissions Cap	Phase 2	$NH_3$	0.21	0.90
Final Emissions Cap	Phase 3	$NH_3$	0.21	0.90
HCI CAPS:				
Initial Emissions Cap	Phase 0	HCI	22.00	3.60
Interim Emissions Cap	Phase 1	HCI	20.97	0.18
Interim Emissions Cap	Phase 2	HCI	0.23	0.07
Final Emissions Cap	Phase 3	HCI	0.23	0.07
Cl₂ CAPS:				
Initial Emissions Cap	Phase 0	$Cl_2$	6.40	1.00
Interim Emissions Cap	Phase 1	$Cl_2$	6.12	0.05
Interim Emissions Cap	Phase 2	$Cl_2$	0.07	0.02

#### AIR CONTAMINANTS DATA

		Air Contaminant Name (1)	<u>Emissi</u> lb/hr	on Rates * TPY**
Final Emissions Cap	Phase 3	$Cl_2$	0.07	0.02
BENZENE CAPS:				
Initial Emissions Cap	Phase 0	benzene	422.60	23.10
Interim Emissions Cap	Phase 1	benzene	38.60	18.80
Interim Emissions Cap	Phase 2	benzene	38.70	20.00
Final Emissions Cap	Phase 3	benzene	38.40	22.60

(1) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 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<sub>10</sub> - particulate matter equal to or less than 10 microns in diameter

CO - carbon monoxide

H<sub>2</sub>SO<sub>4</sub> - sulfuric acid H<sub>2</sub>S - hydrogen sulfide NH<sub>3</sub> - ammonia

HCl - hydrogen chloride

Cl<sub>2</sub> - chlorine

Dated November 18, 2004

<sup>\*</sup> Emission rates are based on operating <u>8,760</u> hrs/year.

<sup>\*\*</sup> Compliance with annual emission limits is based on a rolling 12-month period.

#### ATTACHMENT I

#### CONTAMINANTS, EMISSION POINT NUMBERS AND SOURCE NAMES

#### Flexible Permit Numbers 9708 and PSD-TX-861M2

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.

Contaminant	Emission Point No. (1)	Source Name (2)
SO₂ SOURCES:		
	B-4	COMPLEX 6 WEST BOILER
	B-5	COMPLEX 6 EAST BOILER
	EP-B-1	COMPLEX 8 BOILER #1
	EP-B-2	COMPLEX 8 BOILER #2
	EP-B-5	COMPLEX 8 BOILER #5
	16-COMP1	#2 REFORMER COMPRESSOR ENGINE
	16-COMP2	#2 REFORMER COMPRESSOR ENGINE
	16-COMP3	#2 REFORMER COMPRESSOR ENGINE
	16-COMP4	#2 REFORMER COMPRESSOR ENGINE
	12-H-1	F.C.C.U. RAW OIL CHARGE HEATER
	17-H-1	ALKY. ISO. STRIPPER REBOILER
	27-H-1	BTX. CLAY TWR. CHARGE HEATER
	27-H-2	TETRAMER SPL. REB. HTR.
	37-H-1	KERO. H.D.S. CHARGE HEATER
	37-H-2	KERO. H.D.S. FRAC. REBOILER
	38-H-1	KEROSENE HDS CHARGE HEATER
	38-H-2	KEROSENE HDS HEATER
	39-H-1	#4 HYDROCARBON CHARGE HEATER
	39-H-2	#4 HYDROBON. STRIPPER REBOILER
	39-H-3A	#4 PLATFORMER CHARGE HEATER
	39-H-3B	#4 PLATFORMER CHARGE HEATER
	39-H-3C	#4 PLATFORMER CHARGE HEATER
	39-H-7	#4 PLATFORMER STAB. REBOILER
	44-H-1	DIESEL HDS HEATER
	44-H-2	DIESEL HDS HEATER

Contaminant (3)	Emission Point No. (1)	Source Name (2)
	44-H-3	DIESEL HDS HEATER
	7-H-2	DELAYED COKER CHARGE HEATER
	8-H-3	#4 VACUUM CHARGE HEATER
	8-H-4	#4 CRUDE CHARGE HEATER
	8-H-5	#4 VACUUM CHARGE HEATER
	8-H-6	#4 CRUDE CHARGE HEATER
	H-TK-47	TANK 47 HEATER
	H-TK-48	TANK 48 HEATER
	H-TK-54	TANK 54 HEATER
	H-TK-70	TANK 70 HEATER
	H-TK-83	TANK 83 HEATER
	Q3-H-4A/B	NAPHTHA SPLT. REBOILER
	Q3-H-3	#2 NAPHTHA H.D.S. HEATER
	Q10-H-1	S.M.R. HEATER
	Q11-H-3001	H.C.U. DEBUT REBOILER
	Q11-H-3002	H.C.U. FRAC. REBOILER
	Q11-H-301	H.C.U. RX. CHARGE HEATER
	QH-125	#2 REFORMER HEATER
	QL-10	#4 PLATFORMER SPLITTER HEATER
	SRU1-INCIN	SRU #1 INCINERATOR
	SRU2-INCIN	SRU #2 INCINERATOR
	BTO-1	MARINE VESSEL LOADING THERMAL OXIDIZER
	TO-2	THERMAL OXIDIZER
	TO-3	MARINE VESSEL LOADING THERMAL OXIDIZER -NEW
	12-CO STK	F.C.C.U. & CO BOILER & E.S.P.
	EP-FLARE1	COMPLEX 8 FLARE (PILOTS)
	HCU-FL1	H.C.U. AREA FLARE
	REF2-FL1	#2 REFORMER AREA FLARE
	SRU1-FLARE	SRU #1 FLARE
	SRU2-FLARE	SRU #2 FLARE
	SWS-FLARE	SOUR H2O STRIP FLARE

Contaminant (3)	Emission Point No. (1)	Source Name (2)
	WP-FLARE1	COMPLEX 7 FLARE
	WP-FLARE1	LEUMER VENT TO FLARE
	WP-FLARE2	COMPLEX 7 FLARE - NEW
	N39-H-1	NEW PLFORMER HEATER
	N39-H-2	NEW PLFORMER HEATER
	39-H-3-5	#4 PLATFORMER HEATER
VOC SOURCES:		
	B-4	COMPLEX 6 WEST BOILER
	B-5	COMPLEX 6 EAST BOILER
	EP-B-1	COMPLEX 8 BOILER #1
	EP-B-2	COMPLEX 8 BOILER #2
	EP-B-5	COMPLEX 8 BOILER #5
	16-COMP1	#2 REFORMER COMPRESSOR ENGINE
	16-COMP2	#2 REFORMER COMPRESSOR ENGINE
	16-COMP3	#2 REFORMER COMPRESSOR ENGINE
	16-COMP4	#2 REFORMER COMPRESSOR ENGINE
	83-CT1	COMPLEX 8MAIN COOLING TOWER
	84-CT2	ALKY. COOLING TOWER
	88-CT7	COMPLEX 7 MAIN COOLING TOWER
	Q-CT4	H.C.U. COOLING TOWER
	Q-CT5	#2 REFORMER COOLING TOWER
	Q-CT8	TBA., SULFO., & BTX. COOLING TOWER
	ALKY1-FE	H.F. ALKYLATION UNIT FUGITIVES
	BLRHSE-FE	BOILER HOUSE FUGITIVES
	BTX1-FE	SULFOLANE BTX. UNIT FUGITIVES
	COKER1-FE	DELAYED COKER UNIT FUGITIVES
	CRUVAC4-FE	#4 CRUDE & VACUUM UNIT FUGITIVES
	DEOCT-FE	#4 PLAT. SPLT. FUGITIVEVS

Contaminant (3)	Emission Point No. (1)	Source Name (2)
	DIST1-FE	KEROSENE HDS FUGITIVES
	DOCK11-FE	MARINE LOADING (DOCK 11) FUGITIVES
	DOCK3-FE	MARINE LOADING (DOCK 3) FUGITIVES
	DOCK4-FE	MARINE LOADING (DOCK 4) FUGITIVES
	DOCK6-FE	MARINE LOADING (DOCK 6) FUGITIVES
	DOCK7-FE	MARINE LOADING (DOCK 7) FUGITIVES
	EP-FLR-FE	COMPLEX 8 FLARE FUGITIVES
	FCCU1-FE	F.C.C.U. FUGITIVES
	GOT1-FE	DIESEL HDS FUGITIVES
	HCU-FE	HYDROCRACKER UNIT FUGITIVES
	HCU-FLR-FE	HYDROCRACKER FLARE HEADER FUGITIVES
	KERO1-FE	KEROSENE H.D.S. FUGITIVES
	LEF1-FE	#1 L.E.F. @ S.S. (XYLENE TOWER FUGITIVES
	LEU1-FE	#1 L.E.U. FUGITIVES
	LEU2-FE	#2 L.E.U. FUGITIVES
	MEROXWP-FE	F.C.C. GASOLINE MEROX FUGITIVES
	NEWBZ-FE	BENZENE SWS FUGITIVES
	NEWSWS-FE	SOUR WATER STRIPPER FUGITIVES
	NONENE1-FE	NONENE UNIT FUGITIVES
	PSA-FE	PRESSURE SWING ABSORBER
	QBTX-FE	SULFOLANE & BTX. UNIT FUGITIVES
	QHDS2-FE	#2 NAPHTHA H.D.S. FUGITIVES
	QNAPSPL-FE	#2 NAPHTHA (#2 REFORMER). SPLITTER FUGITIVES
	QREF2-FE	#2 REFORMER FUGITIVES
	QSULFO-FE	SULFOCANE FUGITIVES
	RAFF1-FE	#1 RAFFINATE SPLITTER
	RAFF2-FE	#2 RAFFINATE SPLITTER
	REF2-FL-FE	#2 REFORMER FLARE HEADER

Contaminant (3)	Emission Point No. (1)	Source Name (2)
	REF4-FE	#4 HYDROBON & PLATFORMER FUGITIVES
	SMR-FE	HYDROGEN PRODUCTION (S.M.R.) FUGITIVES
	SRU1-FE	SRU #1FUGITIVES
	SRU2-FE	SRU #2 FUGITIVES
	SULFO1-FE	SULFOLANE FUGITIVES
	SWS1-FE	S.W.S. UNIT FUGITIVES
	SWS2-FE	BENZENE S.W.S. FUGITIVES
	TKFMEPN-FE	COMPLEX 8 NORTH TANK FARM FUGITIVES
	TKFMEPS-FE	COMPLEX 8 SOUTH TANK FARM FUGITIVES
	TKFMQPN-FE	COMPLEX 6 NORTH TANK FARM FUGITIVES
	TKFMWP-FE	COMPLEX 7 TANK FARM FUGITIVES
	TRUCKRK-FE	TRUCK LOADING RACK FUGITIVES
	WP-FLR-FE	COMPLEX 7 FLARE FUGITIVES
	12-H-1	F.C.C.U. RAW OIL CHARGE HEATER
	17-H-1	ALKY. ISO. STRIPPER REBOILER
	27-H-1	BTX. CLAY TWR. CHARGE HEATER
	27-H-2	TETRAMER SPL. REB. HTR.
	37-H-1	KERO. H.D.S. CHARGE HEATER
	37-H-2	KERO. H.D.S. FRAC. REBOILER
	38-H-1	KEROSENE HDS CHARGE HEATER
	38-H-2	KEROSENE HDS HEATER
	39-H-1	#4 HYDROCARBON CHRGE. HEATER
	39-H-2	#4 HYDROBON. STRIPPER REBOILER
	39-H-3A	#4 PLATFORMER CHARGE HEATER
	39-H-3B	#4 PLATFORMER CHARGE HEATER
	39-H-3C	#4 PLATFORMER CHARGE HEATER
	39-H-7	#4 PLATFORMER STAB. REBOILER
	44-H-1	DIESEL HDS HEATER
	44-H-2	DIESEL HDS HEATER
	44-H-3	DIESEL HDS HEATER
	7-H-2	DELAYED COKER CHARGE HEATER

Contaminant (3)	Emission Point No. (1)	Source Name (2)
	8-H-3	#4 VACUUM CHARGE HEATER
	8-H-4	#4 CRUDE CHARGE HEATER
	8-H-5	#4 VACUUM CHARGE HEATER
	8-H-6	#4 CRUDE CHARGE HEATER
	H-TK-47	TANK 47 HEATER
	H-TK-48	TANK 48 HEATER
	H-TK-54	TANK 54 HEATER
	H-TK-70	TANK 70 HEATER
	H-TK-83	TANK 83 HEATER
	Q3-H-4A/B	NAPHTHA SPLT. REBOILER
	Q3-H-3	#2 NAPHTHA H.D.S. HEATER
	Q10-H-1	S.M.R. HEATER
	Q11-H-3001	H.C.U. DEBUT REBOILER
	Q11-H-3002	H.C.U. FRAC. REBOILER
	Q11-H-301	H.C.U. RX. CHARGE HEATER
	QH-125	#2 REFORMER HEATER
	QL-10	#4 PLATFORMER SPLITTER HEATER
	SRU1-INCIN	SRU #1 INCINERATOR
	SRU2-INCIN	SRU #2 INCINERATOR
	ASPH-RCLDG	ASPHALT & LATEX RAILCAR LOADING
	ASPH-TLDG	ASPHALT TRUCK LOADING
	BTO-1	MARINE VESSEL LOADING THERMAL OXIDIZER
	PD-6	MARINE LOADING (DOCK 6) FUGITIVES
	LATEX-TLDG	LATEX TRUCK LOADING
	MARINE-LDG	MARINE LOADING
	RC-RACK1	RAILCAR LOADING
	SULF-RCLDG	SULFUR RAILCAR LOADING
	SULF-TLDG	SULFUR TRUCK LOADING

Contaminant (3)	Emission Point No. (1)	Source Name (2)
	TO-2	THERMAL OXIDIZER
	TO-3	MARINE LOADING THERMAL OXIDIZER - NEW
	TT-RACK1	TRUCK LOADING RACK
	12-CO STK	F.C.C.U. & CO BOILER & E.S.P.
	2REGENVENT	#2 REFORMER REGEN VENT
	4REGENVENT	#4 PLATFORMER REGEN VENT
	TK-123	TANK 123
	TK-124	TANK 124
	TK-125	TANK 125
	TK-126	TANK 126
	TK-131	TANK 131
	TK-132	TANK 132
	TK-133	TANK 133
	TK-231	TANK 231
	TK-232	TANK 232
	TK-233	TANK 233
	TK-234	TANK 234
	TK-235	TANK 235
	TK-380	TANK 380
	TK-381	TANK 381
	TK-382	TANK 382
	TK-383	TANK 383
	29-TK-18	M.D.E.A. TANK
	SWS1-T3	SOUR WATER SURGE TANK
	TK-10	TANK 10
	TK-100	TANK 100
	TK-101	TANK 101
	TK-102	TANK 102

Contaminant (3)	Emission Point No. (1)	Source Name (2)
	TK-104	TANK 104
	TK-106	TANK 96-TK-0142
	TK-107	TANK 107
	TK-109	TANK 109
	TK-110	TANK 110
	TK-11	TANK 11
	TK-111	TANK 111
	TK-112	TANK 112
	TK-113	TANK 113
	TK-114	TANK 114
	TK-115	TANK 115
	TK-116	TANK 116
	TK-118	TANK 118
	TK-122	TANK 122
	TK-127	TANK 127
	TK-128	TANK 128
	TK-134	TANK 134
	TK-135	TANK 135
	TK-138	TANK 138
	TK-14	TANK 14
	TK-142	TANK 142
	TK-146	TANK 146
	TK-147	TANK 147
	TK-15	TANK 15
	TK-151	TANK 151
	TK-152	TANK 152
	TK-153	TANK 153
	TK-17	TANK 17

Contaminant (3)	Emission Point No. (1)	Source Name (2)
	TK-19	TANK 19
	TK-20	TANK 20
	TK-200	TANK 200
	TK-201	TANK 201
	TK-202	TANK 202
	TK-203	TANK 203
	TK-204	TANK 204
	TK-205	TANK 205
	TK-206	TANK 206
	TK-207	TANK 96-TK-0207 ??
	TK-208	TANK 208
	TK-209	TANK 209
	TK-21	TANK 21
	TK-210	TANK 210
	TK-211	TANK 211
	TK-212	TANK 212
	TK-213	TANK 213
	TK-214	TANK 214
	TK-215	TANK 215
	TK-236	TANK 236
	TK-237	TANK 237
	TK-22	TANK 22
	TK-23	TANK 23
	TK-25	TANK 25
	TK-310	TANK 310
	TK-311	TANK 311
	TK-312	TANK 312
	TK-320	TANK 320

Contaminant (3)	Emission Point No. (1)	Source Name (2)
	TK-321	TANK 321
	TK-322	TANK 322
	TK-323	TANK 323
	TK-324	TANK 324
	TK-325	TANK 325
	TK-326	TANK 326
	TK-327	TANK 327
	TK-328	TANK 328
	TK-329	TANK 329
	TK-330	TANK 330
	TK-331	TANK 331
	TK-332	TANK 332
	TK-333	TANK 333
	TK-334	TANK 334
	TK-335	TANK 335
	TK-336	TANK 336
	TK-350	TANK 350
	TK-351	TANK 351
	TK-352	TANK 352
	TK-353	TANK 353
	TK-354	TANK 354
	TK-355	TANK 355
	TK-356	TANK 356
	TK-357	TANK 357
	TK-358	TANK 358
	TK-359	TANK 359
	TK-360	TANK 360
	TK-370	TANK 370

Contaminant (3)	Emission Point No. (1)	Source Name (2)
	TK-371	TANK 371
	TK-47	TANK 47
	TK-48	TANK 48
	TK-50	TANK 50
	TK-500	TANK 500
	TK-501	TANK 501
	TK-502	TANK 502
	TK-503	TANK 503
	TK-504	TANK 504
	TK-505	TANK 505
	TK-506	TANK 506
	TK-507	TANK 507
	TK-508	TANK 508
	TK-509	TANK 509
	TK-51	TANK 51
	TK-510	TANK 510
	TK-52	TANK 52
	TK-53	TANK 53
	TK-54	TANK 54
	TK-55	TANK 55
	TK-57	TANK 57
	TK-58	TANK 58
	TK-7	TANK 7
	TK-70	TANK 70
	TK-71	TANK 71
	TK-72	TANK 72
	TK-73	TANK 73
	TK-74	TANK 74

Contaminant (3)	Emission Point No. (1)	Source Name (2)
	TK-75	TANK 75
	TK-76	TANK 76
	TK-77	TANK 77
	TK-79	TANK 79
	TK-80	TANK 80
	TK-81	TANK 81
	TK-82	TANK 82
	TK-83	TANK 83
	TK-84	TANK 84
	TK-85	TANK 85
	TK-86	TANK 86
	TK-87	TANK 87
	TK-88	TANK 88
	TK-89	TANK 89
	TK-9	TANK 9
	TK-90	TANK 90
	TK-91	TANK 91
	TK-92	TANK 92
	TK-93	TANK 93
	TK-94	TANK 94
	TK-95	TANK 95
	TK-96	TANK 96
	TK-97	TANK 97
	TK-98	TANK 98
	TK-99	TANK 99
	TO-2	TANK 108
	TO-2	TANK 141
	TO-2	TANK 143
	TO-2	TANK 144
	TO-2	TANK 145
	EP-FLARE1	COMPLEX 8 FLARE (PILOTS)

Contaminant (3)	Emission Point No. (1)	Source Name (2)
	EP-FLARE1	ALKY NON-ACID FLARE KNOCKOUT DRUM VENT
	EP-FLARE1	SULFOLANE & BTX, OVHD, RECEIVERS VENT
	EP-FLARE1	PP/BB MERCAPTAN STRIPPER VENT
	17-H-1	PP/BB MEROX DISULFIDE VENT DRUM VENT ??
	HCU-FL1	H.C.U. AREA FLARE
	REF2-FL1	#2 REFORMER AREA FLARE
	REF2-FL1	SULFOLANE & BTX. OVHD. RECEIVERS VENT
	REF2-FL1	SULFOLANE EXTRACTOR VENT GAS DRUM VENT ??
	SRU1-FLARE	SRU #1 FLARE
	SRU2-FLARE	SRU #2 FLARE
	SWS-FLARE	SOUR H2O STRIP FLARE
	WP-FLARE1	COMPLEX 7 FLARE
	WP-FLARE2	COMPLEX 7 FLARE - NEW GROUP OF WATER9
	N39-H-1	NEW PLATFORMER HEATER
	N39-H-2	NEW PLATFORMER HEATER
	39-H-3-5	#4 PLATFORMER HEATER
	WP-FLARE1	SOUR WATER STRIPPER SURGE DRUM VENT
	WP-FLARE1	BENZENE WATER STRIPPER OFF-GAS
	WP-FLARE1	A.R.U. #1 FEED SURGE DRUM VENT
	WP-FLARE1	AMINE RECOVERY UNIT #2 SURGE DRUM VENT
	PMA-FE	ASPHALT BLENDING UNIT FUGITIVES
	175-TK-001	ASPHALT BLENDING UNIT WETTING TANK
	175-TK-002	ASPHLAT BLENDING UNIT MIXING TANK
	175-TK-003	ASPHLAT BLENDING UNIT MIXING TANK
	PMA-LOAD	ASPHLAT BLENDING UNIT LOADING
	HCU-FL1	HCU FRACTIONATOR OVERHEAD RECEIVER VENT
	REF2-FL1	#2 NAPHTHA HDS VENT
	90-TK-61	SLUDGE HOLDING TANK

Contaminant (3)	Emission Point No. (1)	Source Name (2)
	90-TK-65	DAF TANK
	90-TK-66	BIOREACTOR TANK
	90-TK-67	BIOREACTOR TANK
	90-TK-68	CLARIFIER TANK
	90-TK-69	CLARIFIER TANK
	90-TK-85	DAF TANK
	91-D-1	SLURRY TANK (SLUDGE CONC)
	91-D-2	MAKE-UP TK (SLUDGE CONC)
	91-D-3	CHARGE TANK (SLUDGE CONC)
	LS-1	WWTP LIFT STATION (COVERED)
	SUMP-1	WWTP SUMP
	T-109	TANK 109
	WWS-EP	EP CPI SEPARATOR (COVERED)
	91-D-4	WP SLUDGE CONCENTRATION TANK
	91-D-5	WP SLUDGE CONCENTRATION TANK
	QP-SUMP1	QP OILY WATER SYSTEM COLL. SUMP/PUMP OUT SYS.
	SUMP-2	WWTP DAF FLOAT/BOTTOMS COLL. PUMP SUMP
	SUMP-3	EP CPI INLET SUMP AND EXCESS INFLOW PUMP
	SUMP-4	WP OILY WATER SYSTEM COLL. SUMP/PUMP OUT SYS.
	90-TK-64	WWTP BIOSLUDGE THICKENER
	90-TK-78	WWTP CLARIFIED ACT. BIOSLUDGE SKIM TANK
	90-TK-60	AEROBIC DIGESTER
NO <sub>x</sub> SOURCES:		
	B-4	COMPLEX 6 WEST BOILER
	B-5	COMPLEX 6 EAST BOILER
	EP-B-1	COMPLEX 8 BOILER #1
	EP-B-2	COMPLEX 8 BOILER #2
	EP-B-5	COMPLEX 8 BOILER #5

Contaminant (3)	Emission Point No. (1)	Source Name (2)
	16-COMP1	#2 REFORMER COMPRESSOR ENGINE
	16-COMP2	#2 REFORMER COMPRESSOR ENGINE
	16-COMP3	#2 REFORMER COMPRESSOR ENGINE
	16-COMP4	#2 REFORMER COMPRESSOR ENGINE
	12-H-1	F.C.C.U. RAW OIL CHARGE HEATER
	17-H-1	ALKY. ISO. STRIPPER REBOILER
	27-H-1	BTX CLAY TWR. CHARGE HEATER
	27-H-2	TETRAMER SPLITTER. REBOILER HEATER
	37-H-1	KERO. H.D.S. CHARGE HEATER
	37-H-2	KERO. H.D.S. FRAC. REBOILER
	38-H-1	KEROSENE HDS CHARGE HEATER
	38-H-2	KEROSENE HDS HEATER
	39-H-1	#4 HYDROCARBON CHARGE HEATER
	39-H-2	#4 HYDROBON. STRIPPER REBOILER
	39-H-3A	#4 PLATFORMER CHARGE HEATER
	39-H-3B	#4 PLATFORMER CHARGE HEATER
	39-H-3C	#4 PLATFORMER CHARGE HEATER
	39-H-7	#4 PLATFORMER STAB. REBOILER
	44-H-1	DIESEL HDS HEATER
	44-H-2	DIESEL HDS HEATER
	44-H-3	DIESEL HDS HEATER
	7-H-2	DELAYED COKER CHARGE HEATER
	8-H-3	#4 VACUUM CHARGE HEATER
	8-H-4	#4 CRUDE CHARGE HEATER
	8-H-5	#4 VACUUM CHARGE HEATER
	8-H-6	#4 CRUDE CHARGE HEATER
	H-TK-47	TANK 47 HEATER
	H-TK-48	TANK 48 HEATER

Contaminant (3)	Emission Point No. (1)	Source Name (2)
	H-TK-54	TANK 54 HEATER
	H-TK-70	TANK 70 HEATER
	H-TK-83	TANK 83 HEATER
	Q3-H-4A/B	NAPHTHA SPLT. REBOILER
	Q3-H-3	#2 NAPHTHA H.D.S. HEATER
	Q10-H-1	S.M.R. HEATER
	Q11-H-3001	H.C.U. DEBUT REBOILER
	Q11-H-3002	H.C.U. FRAC. REBOILER
	Q11-H-301	H.C.U. RX. CHARGE HEATER
	QH-125	#2 REFORMER HEATER
	QL-10	#4 PLATFORMER SPLITTER HEATER
	SRU1-INCIN	SRU #1 INCINERATOR
	SRU2-INCIN	SRU #2 INCINERATOR
	BTO-1	MARINE VESSEL LOADING THERMAL OXIDIZER
	TO-2	THERMAL OXIDIZER
	TO-3	MARINE VESSEL LOADING THERMAL OXIDIZER - NEW
	12-CO STK	F.C.C.U. & CO BOILER & E.S.P.
	EP-FLARE1	COMPLEX 8 FLARE (PILOTS)
	HCU-FL1	H.C.U. AREA FLARE
	REF2-FL1	#2 REFORMER AREA FLARE
	SRU1-FLARE	SRU #1 FLARE
	SRU2-FLARE	SRU #2 FLARE
	SWS-FLARE	SOUR H2O STRIP FLARE
	WP-FLARE1	COMPLEX 7 FLARE
	WP-FLARE2	COMPLEX 7 FLARE - NEW
	N39-H-1	NEW PLFORMER HEATER
	N39-H-2	NEW PLFORMER HEATER
	39-H-3-5	#4 PLATFORMER HEATER

Contaminant (3)	Emission Point No. (1)	Source Name (2)
CO SOURCES:		
	B-4	COMPLEX 6 WEST BOILER
	B-5	COMPLEX 6 EAST BOILER
	EP-B-1	COMPLEX 8 BOILER #1
	EP-B-2	COMPLEX 8 BOILER #2
	EP-B-5	COMPLEX 8 BOILER #5
	16-COMP1	#2 REFORMER COMPRESSOR ENGINE
	16-COMP2	#2 REFORMER COMPRESSOR ENGINE
	16-COMP3	#2 REFORMER COMPRESSOR ENGINE
	16-COMP4	#2 REFORMER COMPRESSOR ENGINE
	12-H-1	F.C.C.U. RAW OIL CHARGE HEATER
	17-H-1	ALKY. ISO. STRIPPER REBOILER
	27-H-1	BTX. CLAY TWR. CHARGE HEATER
	27-H-2	TETRAMER SPLITTER REBOILER HEATER
	37-H-1	KERO. H.D.S. CHARGE HEATER
	37-H-2	KERO. H.D.S. FRAC. REBOILER
	38-H-1	KEROSENE HDS CHARGE HEATER
	38-H-2	KEROSENE HDS HEATER
	39-H-1	#4 HYDROCARBON CHARGE HEATER
	39-H-2	#4 HYDROBON. STRIPPER REBOILER
	39-H-3A	#4 PLATFORMER CHARGE HEATER
	39-H-3B	#4 PLATFORMER CHARGE HEATER
	39-H-3C	#4 PLATFORMER CHARGE HEATER
	39-H-7	#4 PLATFORMER STAB. REBOILER
	44-H-1	DIESEL HDS HEATER
	44-H-2	DIESEL HDS HEATER
	44-H-3	DIESEL HDS HEATER
	7-H-2	DELAYED COKER CHARGE HEATER

Contaminant (3)	Emission Point No. (1)	Source Name (2)
	8-H-3	#4 VACUUM CHARGE HEATER
	8-H-4	#4 CRUDE CHARGE HEATER
	8-H-5	#4 VACUUM CHARGE HEATER
	8-H-6	#4 CRUDE CHARGE HEATER
	H-TK-47	TANK 47 HEATER
	H-TK-48	TANK 48 HEATER
	H-TK-54	TANK 54 HEATER
	H-TK-70	TANK 70 HEATER
	H-TK-83	TANK 83 HEATER
	Q3-H-4A/B	NAPHTHA SPLT. REBOILER
	Q3-H-3	#2 NAPHTHA H.D.S. HEATER
	Q10-H-1	S.M.R. HEATER
	Q11-H-3001	H.C.U. DEBUT REBOILER
	Q11-H-3002	H.C.U. FRAC. REBOILER
	Q11-H-301	H.C.U. RX. CHARGE HEATER
	QH-125	#2 REFORMER HEATER
	QL-10	#4 PLATFORMER SPLITTER HEATER
	SRU1-INCIN	SRU #1 INCINERATOR
	SRU2-INCIN	SRU #2 INCINERATOR
	BTO-1	MARINE VESSEL LOADING THERMAL OXIDIZER
	TO-2	THERMAL OXIDIZER
	TO-3	MARINE VESSEL LOADING THERMAL OXIDIZER - NEW
	12-CO STK	F.C.C.U. & CO BOILER & E.S.P.
	EP-FLARE1	COMPLEX 8 FLARE (PILOTS)
	HCU-FL1	H.C.U. AREA FLARE
	REF2-FL1	#2 REFORMER AREA FLARE
	SRU1-FLARE	SRU #1 FLARE
	SRU2-FLARE	SRU #2 FLARE
	SWS-FLARE	SOUR H2O STRIP FLARE
	WP-FLARE1	COMPLEX 7 FLARE
	WP-FLARE2	COMPLEX 7 FLARE - NEW

0	Emission	
Contaminant (3)	Point No. (1)	Source Name (2)
	N39-H-1	NEW PLFORMER HEATER
	N39-H-2	NEW PLFORMER HEATER
	39-H-3-5	#4 PLATFORMER HEATER
PM SOURCES:		
	B-4	COMPLEX 6 WEST BOILER
	B-5	COMPLEX 6 EAST BOILER
	EP-B-1	COMPLEX 8 BOILER #1
	EP-B-2	COMPLEX 8 BOILER #2
	EP-B-5	COMPLEX 8 BOILER #5
	CH1	TRUCK DUMP FUG.
	CH2	HOPPER & CONVEYOR FUGITIVES
	CH3	COKE STOCKPILE FUGITIVES
	FU-1	COKE DRUM & CLAM SHELL FUGITIVES
	16-COMP1	#2 REFORMER COMPRESSOR ENGINE
	16-COMP2	#2 REFORMER COMPRESSOR ENGINE
	16-COMP3	#2 REFORMER COMPRESSOR ENGINE
	16-COMP4	#2 REFORMER COMPRESSOR ENGINE
	83-CT1	COMPLEX 8MAIN COOLING TOWER
	84-CT2	ALKY. COOLING TOWER
	88-CT7	COMPLEX 7 MAIN COOLING TOWER
	Q-CT4	H.C.U. COOLING TOWER
	Q-CT5	#2 REFORMER COOLING TOWER
	Q-CT8	TBA., SULFO., & BTX. COOLING TOWER
	12-H-1	F.C.C.U. RAW OIL CHARGE HEATER
	17-H-1	ALKY. ISO. STRIPPER REBOILER
	27-H-1	BTX. CLAY TWR. CHARGE HEATER
	27-H-2	TETRAMER SPLITTER REBOILER HEATER
	37-H-1	KERO. H.D.S. CHARGE HEATER

Contaminant (3)	Emission Point No. (1)	Source Name (2)
	37-H-2	KERO. H.D.S. FRAC. REBOILER
	38-H-1	KEROSENE HDS CHARGE HEATER
	38-H-2	KEROSENE HDS HEATER
	39-H-1	#4 HYDROBON CHRGE. HEATER
	39-H-2	#4 HYDROBON. STRIPPER REBOILER
	39-H-3A	#4 PLATFORMER CHARGE HEATER
	39-H-3B	#4 PLATFORMER CHARGE HEATER
	39-H-3C	#4 PLATFORMER CHARGE HEATER
	39-H-7	#4 PLATFORMER STAB. REBOILER
	44-H-1	DIESEL HDS HEATER
	44-H-2	DIESEL HDS HEATER
	44-H-3	DIESEL HDS HEATER
	7-H-2	DELAYED COKER CHARGE HEATER
	8-H-3	#4 VACUUM CHARGE HEATER
	8-H-4	#4 CRUDE CHARGE HEATER
	8-H-5	#4 VACUUM CHARGE HEATER
	8-H-6	#4 CRUDE CHARGE HEATER
	H-TK-47	TANK 47 HEATER
	H-TK-48	TANK 48 HEATER
	H-TK-54	TANK 54 HEATER
	H-TK-70	TANK 70 HEATER
	H-TK-83	TANK 83 HEATER
	Q3-H-4A/B	NAPHTHA SPLT. REBOILER
	Q3-H-3	#2 NAPHTHA H.D.S. HEATER
	Q10-H-1	S.M.R. HEATER
	Q11-H-3001	H.C.U. DEBUT REBOILER
	Q11-H-3002	H.C.U. FRAC. REBOILER
	Q11-H-301	H.C.U. RX. CHARGE HEATER

Contaminant (3)	Emission Point No. (1)	Source Name (2)
	QH-125	#2 REFORMER HEATER
	QL-10	#4 PLATFORMER SPLITTER HEATER
	SRU1-INCIN	SRU #1 INCINERATOR
	SRU2-INCIN	SRU #2 INCINERATOR
	BTO-1	MARINE VESSEL LOADING THERMAL OXIDIZER
	TO-2	THERMAL OXIDIZER
	TO-3	MARINE VESSEL LOADING THERMAL OXIDIZER - NEW
	12-CO STK	F.C.C.U. & CO BOILER & E.S.P.
	N39-H-1	NEW PLFORMER HEATER
	N39-H-2	NEW PLFORMER HEATER
	39-H-3-5	#4 PLATFORMER HEATER
H₂S SOURCES:		
H2S SOURCES:	EP-FLARE1	COMPLEX 8 FLARE (PILOTS)
	REF2-FL1	#2 REFORMER AREA FLARE
	WP-FLARE1	COMPLEX 7 FLARE
	SRU1-INCIN	SRU #1 INCINERATOR
	SRU2-INCIN	SRU #2 INCINERATOR
	ALKY1-FE	H.F. ALKYLATION UNIT FUGITIVES
	COKER1-FE	DELAYED COKER UNIT FUGITIVES
	CRUVAC4-FE	#4 CRUDE & VACUUM UNIT FUGITIVES
	DIST1-FE	KEROSENE HDS FUGITIVES
	FCCU1-FE	F.C.C.U. FUGITIVES
	GOT1-FE	DIESEL HDS FUGITIVES
	HCU-FE	HYDROCRACKER UNIT FUGITIVES
	KERO1-FE	KEROSENE H.D.S. FUGITIVES
	LEU1-FE	#1 L.E.U. FUGITIVES
	LEU2-FE	#2 L.E.U. FUGITIVES
	NEWBZ-FE	BENZENE SWS FUGITIVES

Contaminant (3)	Emission Point No. (1)	Source Name (2)
	NEWSWS-FE	SOUR WATER STRIPPER FUGITIVES
	REF4-FE	#4 HYDROBON & PLATFORMER FUGITIVES
	SMR-FE	HYDROGEN PRODUCTION (S.M.R.) FUGITIVES
	BLRHSE-FE	BOILER HOUSE FUGITIVES
	EP-FLR-FE	COMPLEX 8 FLARE FUGITIVES
	HCU-FLR-FE	HYDROCRACKER FLARE HEADER
	MEROXWP-FE	F.C.C. GASOLINE MEROX FUGITIVES
	QHDS2-FE	#2 NAPHTHA H.D.S. FUGITIVES
	QNAPSPL-FE	#2 NAPHTHA (#2 REFORMER) SPLITTER FUGITIVES
	REF2-FL-FE	#2 REFORMER FLARE HEADER
	WP-FLR-FE	COMPLEX 7 FLARE FUGITIVES
	SRU1-FE	SRU #1FUGITIVES
	SRU2-FE	SRU #2 FUGITIVES
	SWS1-FE	S.W.S. UNIT FUGITIVES
	SWS2-FE	BENZENE S.W.S. FUGITIVES
NH₃ SOURCES:		
	ALKY1-FE	H.F. ALKYLATION UNIT FUGITIVES
	COKER1-FE	DELAYED COKER UNIT FUGITIVES
	CRUVAC4-FE	#4 CRUDE & VACUUM UNIT FUGITIVES
	DIST1-FE	KEROSENE HDS FUGITIVES
	FCCU1-FE	F.C.C.U. FUGITIVES
	GOT1-FE	DIESEL HDS FUGITIVES
	HCU-FE	HYDROCRACKER UNIT FUGITIVES
	KERO1-FE	KEROSENE H.D.S. FUGITIVES
	LEU1-FE	#1 L.E.U. FUGITIVES
	LEU2-FE	#2 L.E.U. FUGITIVES
	NEWBZ-FE	BENZENE SWS FUGITIVES

NEWSWS-FE SOUR WATER STRIPPER FUGITIVES

REF4-FE #4 HYDROBON & PLATFORMER FUGITIVES

SMR-FE HYDROGEN PRODUCTION (S.M.R.) FUGITIVES

SRU1-FE SRU #1FUGITIVES
SRU2-FE SRU #2 FUGITIVES

SWS1-FE S.W.S. UNIT FUGITIVES

SWS2-FE BENZENE S.W.S. FUGITIVES

**HCI SOURCES:** 

4REGENVEN #4 PLATFORMER REGEN VENT

2REGENVEN #2 REFORMER REGEN VENT

Cl<sub>2</sub> SOURCES:

4REGENVEN #4 PLATFORMER REGEN VENT

2REGENVEN #2 REFORMER REGEN VENT

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H<sub>2</sub>SO<sub>4</sub> SOURCES:

12-CO STK F.C.C.U. & CO BOILER & E.S.P.

- (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) SO<sub>2</sub> sulfur dioxide

VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1

NO<sub>x</sub> - total oxides of nitrogen

CO - carbon monoxide

PM - particulate matter, suspended in the atmosphere, including PM<sub>10</sub>.

PM<sub>10</sub> - particulate matter equal to or less than 10 microns in diameter

H<sub>2</sub>SO<sub>4</sub> - sulfuric acid

H<sub>2</sub>S - hydrogen sulfide

NH<sub>3</sub> - ammonia

HCl - hydrogen chloride

Cl<sub>2</sub> - chlorine

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Dated November 18, 2004