Emission Sources - Maximum Allowable Emission Rates

Flexible Permit Numbers 9868A and PSDTX102M7

Emission Cap Table

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, sources, and related activities. 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.

VOC Emission Cap

Source Name	Year	Emission Rate Caps	
		lbs/hour	TPY (4)
Flares Fired Units (Furnaces, Heaters, Boilers, etc.) FCCU CO Boilers Engines Cooling Towers Wastewater (5) Tanks Truck and Rail Loading Fugitives (5) Incinerators Vents (56V1)	1995 (Initial)	11,071	10,202
	1996	10,978	10,134
	1997	10,776	9,912
	1998	8,908	9,795
	1999	4,941	9,374
	2000	4,399	7,396
	2001	4,229	7,140
	2002	4,068	6,718
	2003	3,760	6,320
	2004	3,110	5,663
	2005A (6)	3,024	5,474
	2005B (6)	3,027	(6)
	2006	2,251	5,015
	2007 (7)	2,244	(7)
	2008	1,992	4,831
	2009 (9) (10)	1,831	4,128
	2011	1,767	3,844

Emission Sources - Maximum Allowable Emission Rates

	2012	1,757.78	3,806

NO_x Emission Cap

Source Name	Year	Emission Rate Caps	
		lbs/hour	TPY (4)
Flares Fired Units (Furnaces, Heaters, Boilers, etc.) FCCU CO Boilers Engines Incinerators	1995 (Initial)	2,082	4,632
	1996	2,014	4,632
	1997	1,957	4,632
	1998	1,957	4,632
	1999	1,843	4,452
	2000	1,753	3,699
	2001	1,697	3,456
	2002	1,590	3,115
	2003	1,519	2,802
	2004	1,445	2,670
	2005A (6)	1,444	2,713
	2005B (6)	1,523	(6)
	2006	1,630	2,915
	2007 (7)	1,656	(7)
	2008	1,320	2,838
	2009 (9) (10)	1,272	2,615
	2011	1,266	2,590
	2012	1,250.39	2,573

Emission Sources - Maximum Allowable Emission Rates

SO_2 Emission Cap

Source Name	Year	Emission Rate Caps	
		lbs/hour	TPY (4)
Flares	1995 (Initial)	7,128	12,740
Fired Units (Furnaces, Heaters, Boilers, etc.)	1996	7,004	12,560
FCCU CO Boilers	1997	6,880	12,016
Engines	1998	6,880	12,017
Incinerators	1999	6,877	12,015
Sulfur Handling	2000	6,850	11,934
Fugitives (5)	2001	6,850	11,934
Wastewater (5)	2002	6,847	11,927
	2003	6,847	11,927
	2004	6,845	11,921
	2005A (6)	6,845	10,680
	2005B (6)	6,854	(6)
	2006	6,860	10,729
	2007 (7)	6,881	(7)
	2008	6,803	3,565
	2009 (9) (10)	6,784	3,550
	2011	6,724	3,420
	2012	6,724	3,420

CO Emission Cap

Emission Sources - Maximum Allowable Emission Rates

Source Name	Year	Emission Rate Caps	
		lbs/hour	TPY (4)
Flares	1995 (Initial)	1,285	5,305
Fired Units (Furnaces, Heaters, Boilers, etc.)	1996	1,295	5,305
FCCU CO Boilers	1997	1,302	5,305
Engines	1998	1,302	5,305
Incinerators	1999	1,260	5,305
	2000	1,204	4,758
	2001	1,206	4,765
	2002	1,164	4,642
	2003	1,168	4,606
	2004	1,166	4,579
	2005A (6)	1,167	4,587
	2005B (6)	1,189	(6)
	2006	1,265	5,013
	2007 (7)	1,319	(7)
	2008	966	4,127
	2009 (9) (10)	930	4,053
	2011	885	3,853
	2012	878.61	3,828

PM Emission Cap

Emission Sources - Maximum Allowable Emission Rates

Source Name	Year	Emission Rate Caps	
		lbs/hour	TPY (4)
Flares	1995 (Initial)	271	1,129
Fired Units (Furnaces, Heaters, Boilers, etc.)	1996	271	1,129
FCCU CO Boilers	1997	271	1,129
Engines	1998	271	1,129
Incinerators	1999	271	1,129
Vacuum Cooling Tower	2000	261	1,125
	2001	261	1,125
	2002	261	1,125
	2003	261	1,125
	2004	261	1,125
	2005A (6)	261	1,120
	2005B (6)	263	(6)
	2006	263	1,103
	2007 (7)	276	(7)
	2008	266	1,123
	2009 (9) (10)	263	1,120
	2012	263	1,120

H_2S Emission Cap

Emission Sources - Maximum Allowable Emission Rates

Source Name	Year	Emission Rate Caps	
		lbs/hour	TPY (4)
Flares Fired Units (Furnaces, Heaters, Boilers, etc.) FCCU CO Boilers Incinerators Sulfur Handling Fugitives (5) Wastewater (5) Vent (32V1) Tank (3003)	1995 (Initial)	128	307
	1996	126	299
	1997	125	292
	1998	128	305
	1999	120	243
	2000	43	115
	2001	42	108
	2002	42	108
	2003	42	108
	2004	37	103
	2005	38	104
	2006	37	97
	2007	33	8
	2008	33	82
	2009 (10)	33	81
	2011	31	72

HCl Emission Cap

Emission Sources - Maximum Allowable Emission Rates

Source Name	Year	Emission Rate Caps	
		lbs/hour	TPY (4)
Flares	1995 (Initial)	13	30
Fugitives (5)	1996	13	30
	1997	12	28
	1998	12	28
	1999	12	28
	2000	5.7	25
	2001	5.7	25
	2002	5.7	25
	2003	5.7	25
	2004	5.7	25
	2005	5.7	25
	2006	5.7	25
	2007	0.51	2.25
	2008	0.04	0.20
	2009 (10)	0.04	0.20

NH_3 Emission Cap

Emission Sources - Maximum Allowable Emission Rates

Source Name	Year	Emission Rate Caps	
		lbs/hour	TPY (4)
Fugitives (5) Wastewater (5) Vent (32V1) Tank (3003)	1995 (Initial)	82	355
	1996	82	355
	1997	82	355
	1998	82	355
	1999	5	7
	2000	2	5.4
	2001	2	5.4
	2002	2	5.4
	2003	2	5.5
	2004	2	5.5
	2005	2	5.5
	2006	2	5.5
	2007	0.8	3.4
	2008	0.8	3.4
	2009 (10)	0.6	2.5

HF Emission Cap

Emission Sources - Maximum Allowable Emission Rates

Source Name	Year	Emission Rate Caps	
		lbs/hour	TPY (4)
Fugitives (5)	1995 (Initial)	0.56	2.44
	1996	0.56	2.44
	1997	0.56	2.44
	1998	0.56	2.44
	1999	0.56	2.44
	2000	0.43	1.9
	2001	0.43	1.9
	2002	0.43	1.9
	2003	0.43	1.9
	2004	0.43	1.9
	2005	0.43	1.9
	2006	0.43	1.9
	2007	0.44	1.9
	2008	0.44	1.9
	2009 (10)	0.44	1.9

Chlorine Cap

Emission Sources - Maximum Allowable Emission Rates

Source Name	Year	Emission Rate Caps	
		lbs/hour	TPY (4)
Cooling Towers	2003	1.65	7.23
	2004	1.65	7.23
	2005	1.65	7.23
	2006	1.65	7.23
	2007	1.24	5.41
	2008	1.24	5.41
	2009 (10)	1.24	5.41

Benzene Cap

Emission Sources - Maximum Allowable Emission Rates

Source Name	Year	Emission Rate Caps	
		lbs/hour	TPY (4)
Flares Tanks Truck and Rail Loading Fugitives (5) Wastewater (5)	1995 (Initial)	47	78
	1996	45	75
	1997	42	68
	1998	41	67
	1999	22	65
	2000	14	35
	2001	13	34
	2002	13	33
	2003	13	33
	2004	12	32
	2005	12	32
	2006	11	31
	2007	10	25.3
	2008	14	28
	2009 (10)	12.9	23.3

Air Contaminants Data

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
85B2	Unit 40 Boiler	CO	42.85	187.7
		NO_x	11.96	52.4
		PM_{10}	4.46	19.5
		SO_2	18.68	81.8
		VOC	3.23	14.1
29P1	Unit 29 FCCU Stack	HCl	0.45	1.96
		NH_3 (8)	9.75	42.71
34I1	SRU TGI Merox VOC Offgas Only	CO	0.32	1.38
		NO_x	0.19	0.82
		PM_{10}	0.03	0.13
		SO_2	0.01	0.01
		VOC	0.21	0.82
40P1	Unit 40 FCCU Stack	HCl	0.22	0.98
		NH_3 (8)	9.75	42.71
F-1-8	Merox Process Fugitives Spent Air (5)	VOC	0.01	0.01
HFTEMP	HF Temporary Tank Process Fugitives (5)	HF	0.01	0.01
		VOC	0.01	0.02
F-28-1-Ex	Unit 28 (1) Exchanger and Heater Integration Fugitives	VOC	0.06	0.26
F-28-2-Ex	Unit 28 (2) Exchanger and Heater Integration Fugitives	VOC	0.02	0.07

Emission Sources - Maximum Allowable Emission Rates

F-32-CIP	Unit 32 Exchanger and Heater Integration Fugitives	VOC	0.04	0.18
F-9-Ex	Unit 9 Exchanger and Heater Integration Fugitives	VOC	0.06	0.26
F-10A-Ex	Unit 10a Train Exchanger and Heater Integration Fugitives	VOC	0.06	0.25
F-10B-Ex	Unit 10b Train Exchanger and Heater Integration Fugitives	VOC	0.10	0.43
F-67	Crude Unit Pump 67 Fugitives	VOC	0.01	0.05
F-56 1-4A(2&5)	West DAF	VOC	0.99	4.36
		NH_3	0.24	1.06
		H_2S	1.81	7.91
F-56-1-2	Flash Mixing	VOC	0.01	0.03
		NH_3	0.01	0.01
		H_2S	0.01	0.06
F-56-1-17	Flocculation	VOC	0.03	0.13
		NH_3	0.01	0.03
		H_2S	0.05	0.24
Permit by rule (PBR) sources incorporated by reference. Sources remain authorized by the PBR(s) as listed below:				
Unregistered Permit by Rule No. 106.371				
U42 Temp CT-A	Cooling Tower	PM_{10}	0.31	1.38
		VOC	0.21	0.92
U42 Temp CT-B	Cooling Tower	PM_{10}	0.32	1.39
		VOC	0.21	0.92

Emission Sources - Maximum Allowable Emission Rates

(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 Title 30 Texas Administrative Code § 101.1
NO_x - total oxides of nitrogen
SO_2 - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM_{10}, as represented
PM_{10} - total particulate matter equal to or less than 10 microns in diameter
CO - carbon monoxide
Cl_2 - chlorine
H_2S - hydrogen sulfide
HCl - hydrogen chloride
HF - hydrogen fluoride
NH_3 - ammonia
(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
(5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
(6) The 2005A caps are in effect prior to startup of the new Hydrogen Unit in 2005.
The 2005B annual caps = 2005A annual caps + ratable increases from Table D-1 dated June 28, 2004, of the hydrogen unit amendment application. Those annual increases/(decreases) in tons per year (TPY) are as follows: VOC = 12; NO_x = 47; SO_2 = 39; CO = 97; and PM = 10.
(7) The 2007 short-term and annual caps will be equal to 2006 caps adjusted for ratable increases/(decreases) due to startup of the Vacuum and Coker Units in 2007 (Table H-1 dated February 14, 2005 of the Vacuum/Coker Unit amendment application). Those annual increases/(decreases) in TPY are as follows:
VOC = 8; NO_x = 54; SO_2 = (7,117); CO = 224; and PM = 28.
(8) Reference to emissions authorized under Standard Permit Registration Number 82659. Emission rates are based on continuous operation.
(9) Reference to emission caps authorized by December 30, 2008 amendment, due to shutdown of EPNs 55E1, 55E3, and 93E4 and the December 11, 2009 issuance of Permit Number 85872, which authorizes operation of Boiler 2.4 (EPN 81B17), and results in the removal of cap contributions from that unit from the caps in this permit.
(10) Emission limits for 2009 caps are the current emissions limits for this permit.

Date: February 25, 2013

ATTACHMENT I

CONTAMINANTS, EMISSION POINT NUMBERS,
AND SOURCE NAMES

Flexible Permit Numbers 9868A and PSDTX102M7

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 (3)	Emission Point No. (1)	Source Name (2)
SO_2 SOURCES:		
	2H1	Unit 2-2 HDS Charge Heater
	2H2	Deoiler Furnace
	4H1	Unit 4 Feed Heater
	4H2	Unit 4 Dehydrator Heater
	5H1	Unit 5-A Feed Heater
	5H2	Unit 5-B Feed Heater
	5H3	Unit 5-C Feed Heater
	6H3	BHU Reduction Furnace
	6H1	Unit 6 Hydro Preheater
	7H1-4	Unit 7 Charge Furnace
	7H1-4	Unit 7 No. 1 Reheater
	7H1-4	Unit 7 No. 2 Reheater
	7H1-4	Unit 7 No. 3 Reheater
	9H1	Crude Oil Heater
	10H1	Crude Oil Heater
	12H1	Mol Sieve Regen Gas Heater
	19H3	19.1 Naphtha HDS Chg Heater
	19H5	19.1 No. 1 Reboiler
	19H5	19.1 No. 2 Reboiler
	19H6	19.2 Platformer Reheater No. 1
	19B1/19H1	19.2 Charge Furnace
	19B1/19H2	19.2 No. 2 Reheater
	19B1/19H2	19.2 No. 3 Reheater
	19B2/19H4	19.3 Charge Furnace

CONTAMINANTS, EMISSION POINT NUMBERS,
AND SOURCE NAMES

Contaminant (3)	Emission Point No. (1)	Source Name (2)
SO_2 SOURCES:		
	19B2/19H4	19.3 Frac Feed Furnace
	22H1	Alky Reboiler Furnace
	26H1	Unit 26 DeC4 Reboiler
	28H1	Unit 28 Charge Heater
	29H4	Unit 29 DeC4 Reboiler
	36H1	HDS Unit Charge Heater
	40H1	Unit 40 Superheater No. 1
	41H1 **(PSD)**	Unit 41 Reformer Furnace
	42H1 **(PSD)**	Unit 42 Reactor Chg Heater
	42H2 **(PSD)**	Unit 42 Reactor Chg Heater
	42H3 (**PSD**)	Unit 42 Fract Feed Heater
	50H1	Unit 50 Charge Heater
	51H1	Unit 51 Charge Heater
	98H1	Unit 98 Reformer Furnace
	7E1	Unit 7 Plat Engine No. 1
	7E2	Unit 7 Plat Engine No. 2
	7E3	Unit 7 Plat Engine No. 3
	7E4	Unit 7 Plat Engine No. 4
	7E5	Unit 7 Plat Engine No. 5
	7E6	Unit 7 Plat Engine No. 6
	12E1	Engine
	12E2	Engine
	12E3	Engine
	12E4	Engine
	12E5	Engine
	12E6	Engine
	12E7	Engine
	55E2	Engine

CONTAMINANTS, EMISSION POINT NUMBERS,
AND SOURCE NAMES

Contaminant (3)	Emission Point No. (1)	Source Name (2)
	93E1	Engine No. 37
SO_2 SOURCES:		
	93E2	Engine No. 38
	29P1	Unit 29 FCCU Stack
	85B2 **(PSD)**	Unit 40 Boiler Stack **(8/06)**
	40P1	Unit 40 FCCU Stack
	34I1	SRU Incinerator
	43I1 **(PSD)**	SCOT Unit Incinerator
	66FL1	Refinery East HC Flare
	66FL2	Refinery West HC Flare
	66FL3	Refinery Cat Flare
	66FL6	H_2S Emergency Flare
	66FL8	100M Sour Brine Flare Pit
	66FL10	100M Swt Brine Flare Pit
	66FL11	30M Swt Brine Flare Pit
	66FL12	GOHDS HC Flare
	66FL13	GOHDS Emergency Sulfur Flare
	50HT1	Coker Heater Tank 1
	50HT2	Coker Heater Tank 2
	50HT3	Coker Heater Tank 3
	FWP1-5	Fire Water Pump Engines
VOC SOURCES:		
	2H1	Unit 2-2 HDS Charge Heater
	2H2	Deoiler Furnace
	4H1	Unit 4 Feed Heater
	4H2	Unit 4 Dehydrator Heater
	5H1	Unit 5-A Feed Heater

CONTAMINANTS, EMISSION POINT NUMBERS,
AND SOURCE NAMES

Contaminant (3)	Emission Point No. (1)	Source Name (2)
VOC SOURCES:		
	5H2	Unit 5-B Feed Heater
	5H3	Unit 5-C Feed Heater
	6H3	BHU Reduction Furnace
	6H1	Unit 6 Hydro Preheater
	7H1-4	Unit 7 Charge Furnace
	7H1-4	Unit 7 No. 1 Reheater
	7H1-4	Unit 7 No. 2 Reheater
	7H1-4	Unit 7 No. 3 Reheater
	9H1	Crude Oil Heater
	10H1	Crude Oil Heater
	12H1	Mol Sieve Regen Gas Heater
	19H3	19.1 Naphtha HDS Chg Heater
	19H5	19.1 No. 1 Reboiler
	19H5	19.1 No. 2 Reboiler
	19H6	19.2 Platformer Reheater No. 1
	19B1/19H1	19.2 Charge Furnace
	19B1/19H2	19.2 No. 2 Reheater
	19B1/19H2	19.2 No. 3 Reheater
	19B2/19H4	19.3 Charge Furnace
	19B2/19H4	19.3 Frac Feed Furnace
	22H1	Alky Reboiler Furnace
	26H1	Unit 26 DeC4 Reboiler
	28H1	Unit 28 Charge Heater
	29H4	Unit 29 DeC4 Reboiler
	36H1	HDS Unit Charge Heater
	40H1	Unit 40 Superheater No. 1
	41H1 **(PSD)**	Unit 41 Reformer Furnace
	42H1 **(PSD)**	Unit 42 Reactor Chg Heater

CONTAMINANTS, EMISSION POINT NUMBERS,
AND SOURCE NAMES

Contaminant (3)	Emission Point No. (1)	Source Name (2)
VOC SOURCES:		
	42H2 **(PSD)**	Unit 42 Reactor Chg Heater
	42H3 **(PSD)**	Unit 42 Fract Feed Heater
	50H1	Unit 50 Charge Heater
	51H1	Unit 51 Charge Heater
	50HT1	Coker Heater Tank 1
	50HT2	Coker Heater Tank 2
	50HT3	Coker Heater Tank 3
	98H1	Unit 98 Reformer Furnace
	7E1	Unit 7 Plat Engine No. 1
	7E2	Unit 7 Plat Engine No. 2
	7E3	Unit 7 Plat Engine No. 3
	7E4	Unit 7 Plat Engine No. 4
	7E5	Unit 7 Plat Engine No. 5
	7E6	Unit 7 Plat Engine No. 6
	12E1	Engine
	12E2	Engine
	12E3	Engine
	12E4	Engine
	12E5	Engine
	12E6	Engine
	12E7	Engine
	55E2	Engine
	93E1	Engine No. 37
	93E2	Engine No. 38
	FWP1-5	Fire Water Pump Engines
	53R1	Refinery Tank Car Loading
	53T1	Refy Tank Truck Loading

CONTAMINANTS, EMISSION POINT NUMBERS,
AND SOURCE NAMES

Contaminant (3)	Emission Point No. (1)	Source Name (2)
VOC SOURCES:		
	53R2	Tank Car Tracks 1 and 2
	53R3	Tank Car Tracks 3 and 4
	53T2	South Tank Truck Loading
	56-4	Truck Loading and Fugitives
	56V1	Caustic Regeneration Vent
	29P1	Unit 29 FCCU Stack
	85B2 **(PSD)**	Unit 40 Boiler **(8/06)**
	40P1	Unit 40 FCCU Stack
	34I1	SRU Incinerator
	43I1 **(PSD)**	SCOT Unit Incinerator
	66FL1	Refinery East HC Flare
	66FL2	Refinery West HC Flare
	66FL3	Refinery Cat Flare
	66FL6	H_2S Emergency Flare
	66FL8	100M Sour Brine Flare Pit
	66FL10	100M Swt Brine Flare Pit
	66FL11	30M Swt Brine Flare Pit
	66FL12	GOHDS HC Flare
	66FL13	GOHDS Emergency Sulfur Flare
	53FL1	Thermal Oxidation Unit
	F-1	Unit 1 Fugitives
	F-1-6	Unit 1.6 Fugitives
	F-1-7	Unit 1.7 Fugitives
	F-2	Unit 2 Columns
	F-2-1	Unit 2.2 Fugitives
	F-2-5	Fractionators
	F-4	Butane Isom Fugitives

CONTAMINANTS, EMISSION POINT NUMBERS,
AND SOURCE NAMES

Contaminant (3)	Emission Point No. (1)	Source Name (2)
VOC SOURCES:		
	F-5	Pentane Isom Fugitives
	F-6	Hexane Isom Fugitives
	F-7	Platformer
	F-9	Unit 9 Fugitives
	F-10	Unit 10 Fugitives
	F-11	Deethanizer Unit Fug
	F-12	Cryogenic Gas Plant Fug
	F-13	Clean-Up Unit Fug
	F-19-1	Naphtha HDS Fugitives
	F-19-2	Reformer Fugitives
	F-19-3	Distillate HDS Fugitives
	F-22	HF Alkylation Fugitives
	F-23	St Run Fract Fugitives
	F-26	HO FCCU Fract Fugitives
	F-28	Unit 28 Fugitives
	F-29	Gas Oil FCCU 29 Fugitives
	F-32	Unit 32 Fugitives
	F-34	Sulfur Recovery Unit Fug
	F-35	Unit 35 Fugitives
	F-36	Unit 36 Fugitives
	F-40	Heavy Oil FCCU Fugitives
	F-41	Fugitives
	F-42	GOHDS Unit 42 Fugitives
	F-43-1	Sulfur Handling/Storage
	F-44	Unit 44 Fugitives
	F-50	Unit 50 Fugitives
	F-51	Unit 51 Fugitives
	F-53-1	Refinery Loading Fugitives

CONTAMINANTS, EMISSION POINT NUMBERS,
AND SOURCE NAMES

Contaminant (3)	Emission Point No. (1)	Source Name (2)
VOC SOURCES:		
	F-53-2	South Loading Rack
	F-55	Air Compressor Fugitives
	F-56	Unit 56 Fugitives
	F-66-1	Ref. Flare Area Fugitives
	F-66-2	South Flare Fug
	F-66-3	GOHDS/Cat Area Fugitives
	F-68-1a	GOHDS Storage Fugitives
	F-68-1e	E. Refinery Storage Fugitives
	F-68-1n	N. Refinery Storage Fugitives
	F-68-1r	Rocky Station Fugitives
	F-68-1s	S. Refinery Storage Fugitives
	F-68-1t	Taubman Yard Fugitives
	F-68-1w	W. Refinery Storage Fugitives
	F-68-2n	N. Coble Storage Fugitives
	F-68-2s	S. Coble Storage Fugitives
	F-68-3	West Storage Fugitives
	F-68-4t	JTF Fugitives
	F-68-5	Gasoline Blending System
	F-81	Refinery Boilers
	F-82	South Boilers
	F-85-2	Unit 40 Boiler Fugitives
	F-98	SMR Fugitives
	F-68-4a	100M SWT Brine Pond
	F-68-4b	55M SWT Brine Pond
	F-68-4c	100M Sour Brine Pond
	F-68-4d	100M SWT Brine Pond
	F-68-4e	30M SWT Brine Pond
	F-68-4f	300M Sour Brine Pond

CONTAMINANTS, EMISSION POINT NUMBERS,
AND SOURCE NAMES

Contaminant (3)	Emission Point No. (1)	Source Name (2)
VOC SOURCES:		
	F-68-4g	2MM Brine Pond
	F-68-4h	3MM Brine Pond
	F-54-C10	Cooling Twr (Refy No. 9)
	F-54-C11	Cooling Twr (Refy No. 3)
	F-54-C12	Cooling Twr (Mar No. 12)
	F-54-C13	Cooling Twr (Prt No. 14)
	F-54-C14	Cooling Twr (Mar No. 15)
	F-54-C15	Cooling Twr (Prt No. 16)
	F-54-C16	Cooling Twr (Prt No. 18)
	F-54-C17	Cooling Twr (Refy No. 8)
	F-54-C18	Cooling Twr (Refy No. 13)
	F-54-C19	Cooling Twr (Refy No. 10)
	F-54-C21	Cooling Twr (Vacuum Unit)
	F-54-C2	Cool Twr (Ecodyne No. 9)
	F-54-C20	Cooling Twr (GOHDS No. 17)
	F-54-C3	Cooling Twr (SF No. 11)
	F-54-C4	Cooling Twr (Mar No. 13)
	F-54-C6	Cooling Twr (Mar No. 10)
	F-54-C7	Cooling Twr (Refy No. 2)
	F-54-C8	Cooling Twr (Refy No. 4)
	F-54-C9	Cooling Twr (Refy No. 7)
	F-56-1-1	West Sump
	F-56-1-3	North Sump
	F-56-1-4-A	Refy Oil/H20 Separators
	F-56-1-6	Storm Water System
	F-56-2	Dixon Creek WWTP
	F-56-1-5	Hazardous Waste Impoundment
	0109	Tank Storage

CONTAMINANTS, EMISSION POINT NUMBERS,
AND SOURCE NAMES

Contaminant (3)	Emission Point No. (1)	Source Name (2)
VOC SOURCES:		
	0110	Tank Storage
	0111	Tank Storage
	0202	Tank Storage
	0401	Tank Storage
	0511	Tank Storage
	0514	Tank Storage
	0552	Tank Storage
	0562	Tank Storage
	0572	Tank Storage
	0573	Tank Storage
	1001	Tank Storage
	1002	Tank Storage
	1003	Tank Storage
	1006	Tank Storage
	1007	Tank Storage
	1012	Tank Storage
	1013	Tank Storage
	1064	Tank Storage
	1067	Tank Storage
	1163	Tank Storage
	1164	Tank Storage
	1165	Tank Storage
	1522	Tank Storage
	2072	Tank Storage
	2510	Tank Storage
	2553	Tank Storage
	2571	Tank Storage
	2572	Tank Storage

CONTAMINANTS, EMISSION POINT NUMBERS,
AND SOURCE NAMES

Contaminant (3)	Emission Point No. (1)	Source Name (2)
VOC SOURCES:		
	2575	Tank Storage
	2576	Tank Storage
	2577	Tank Storage
	2578	Tank Storage
	2579	Tank Storage
	2580	Tank Storage
	2670	Tank Storage
	2672	Tank Storage
	2673	Tank Storage
	2674	Tank Storage
	2675	Tank Storage
	2676	Tank Storage
	2677	Tank Storage
	2678	Tank Storage
	3001	Tank Storage
	3002	Tank Storage
	3003	Tank Storage
	4030	Tank Storage
	5001SCRUB	Tank Storage
	5505	Tank Storage
	5508	Tank Storage
	5511	Tank Storage
	5520	Tank Storage
	5521	Tank Storage
	5525	Tank Storage
	5531	Tank Storage
	5532	Tank Storage
	5536	Tank Storage

CONTAMINANTS, EMISSION POINT NUMBERS,
AND SOURCE NAMES

Contaminant (3)	Emission Point No. (1)	Source Name (2)
VOC SOURCES:		
	5537	Tank Storage
	5539	Tank Storage
	5540	Tank Storage
	5541	Tank Storage
	5542	Tank Storage
	5543	Tank Storage
	5544	Tank Storage
	5545	Tank Storage
	5548	Tank Storage
	5550	Tank Storage
	5551	Tank Storage
	5553	Tank Storage
	5554	Tank Storage
	5555	Tank Storage
	5556	Tank Storage
	5557	Tank Storage
	5558	Tank Storage
	5559	Tank Storage
	5560	Tank Storage
	5578	Tank Storage
	5580	Tank Storage
	5583	Tank Storage
	5584	Tank Storage
	5587	Tank Storage
	5588	Tank Storage
	5589	Tank Storage
	5590	Tank Storage
	5591	Tank Storage

CONTAMINANTS, EMISSION POINT NUMBERS,
AND SOURCE NAMES

Contaminant (3)	Emission Point No. (1)	Source Name (2)
VOC SOURCES:		
	5592	Tank Storage
	5593	Tank Storage
	5596	Tank Storage
	5597	Tank Storage
	5598	Tank Storage
	5599	Tank Storage
	8001	Tank Storage
	8002	Tank Storage
	8010	Tank Storage
	8011	Tank Storage
	8012	Tank Storage
	8013	Tank Storage
	8014	Tank Storage
	8015	Tank Storage
	8031	Tank Storage
	8032	Tank Storage
	8033	Tank Storage
	8034	Tank Storage
	9200	Tank Storage
	9201	Tank Storage
	9202	Tank Storage
	9500	Tank Storage
	9501	Tank Storage
	9502	Tank Storage
	9503	Tank Storage
	9504	Tank Storage
	9700	Tank Storage
	9701	Tank Storage

CONTAMINANTS, EMISSION POINT NUMBERS,
AND SOURCE NAMES

Contaminant (3)	Emission Point No. (1)	Source Name (2)
	9702	Tank Storage
NO_x SOURCES:		
	2H1	Unit 2-2 HDS Charge Heater
	2H2	Deoiler Furnace
	4H1	Unit 4 Feed Heater
	4H2	Unit 4 Dehydrator Heater
	5H1	Unit 5-A Feed Heater
	5H2	Unit 5-B Feed Heater
	5H3	Unit 5-C Feed Heater
	6H3	BHU Reduction Furnace
	6H1	Unit 6 Hydro Preheater
	7H1-4	Unit 7 Charge Furnace
	7H1-4	Unit 7 No. 1 Reheater
	7H1-4	Unit 7 No. 2 Reheater
	7H1-4	Unit 7 No. 3 Reheater
	9H1	Crude Oil Heater
	10H1	Crude Oil Heater
	12H1	Mol Sieve Regen Gas Heater
	19H3	19.1 Naphtha HDS Chg Htr
	19H5	19.1 No. 1 Reboiler
	19H5	19.1 No. 2 Reboiler
	19B1/19H1	19.2 Charge Furnace
	19H6	19.2 Platformer Reheater No. 1
	19B1/19H2	19.2 No. 2 Reheater
	19B1/19H2	19.2 No. 3 Reheater
	19B2/19H4	19.3 Charge Furnace
	19B2/19H4	19.3 Frac Feed Furnace
	22H1	Alky Reboiler Furnace
	26H1	Unit 26 DeC4 Reboiler

CONTAMINANTS, EMISSION POINT NUMBERS,
AND SOURCE NAMES

Contaminant (3)	Emission Point No. (1)	Source Name (2)
	28H1	Unit 28 Charge Heater
NO_x SOURCES:		
	29H4	Unit 29 DeC4 Reboiler
	36H1	HDS Unit Charge Heater
	40H1	Unit 40 Superheater No. 1
	41H1 **(PSD)**	Unit 41 Reformer Furnace
	42H1 **(PSD)**	Unit 42 Reactor Chg Heater
	42H2 **(PSD)**	Unit 42 Reactor Chg Heater
	42H3 **(PSD)**	Unit 42 Fract Feed Heater
	50H1	Unit 50 Charge Heater
	51H1	Unit 51 Charge Heater
	50HT1	Coker Heater Tank 1
	50HT2	Coker Heater Tank 2
	50HT3	Coker Heater Tank 3
	98H1	Unit 98 Reformer Furnace
	7E1	Unit 7 Plat Engine No. 1
	7E2	Unit 7 Plat Engine No. 2
	7E3	Unit 7 Plat Engine No. 3
	7E4	Unit 7 Plat Engine No. 4
	7E5	Unit 7 Plat Engine No. 5
	7E6	Unit 7 Plat Engine No. 6
	12E1	Engine
	12E2	Engine
	12E3	Engine
	12E4	Engine
	12E5	Engine
	12E6	Engine
	12E7	Engine
	55E2	Engine
	93E1	Engine No. 37

CONTAMINANTS, EMISSION POINT NUMBERS,
AND SOURCE NAMES

Contaminant (3)	Emission Point No. (1)	Source Name (2)
NO_x SOURCES:		
	93E2	Engine No. 38
	FWP1-5	Fire Water Pump Engines
	29P1	Unit 29 FCCU Stack
	85B2 **(PSD)**	Unit 40 Boiler **(8/06)**
	40P1	Unit 40 FCCU Stack
	34I1	SRU Incinerator
	43I1 **(PSD)**	SCOT Unit Incinerator
	66FL1	Refinery East HC Flare
	66FL2	Refinery West HC Flare
	66FL3	Refinery Cat Flare
	66FL6	H_2S Emergency Flare
	66FL8	100M Sour Brine Flare Pit
	66FL10	100M Swt Brine Flare Pit
	66FL11	30M Swt Brine Flare Pit
	66FL12	GOHDS HC Flare
	66FL13	GOHDS Emergency Sulfur Flare
CO SOURCES:		
	2H1	Unit 2-2 HDS Charge Htr
	2H2	Deoiler Furnace
	4H1	Unit 4 Feed Heater
	4H2	Unit 4 Dehydrator Heater
	5H1	Unit 5-A Feed Heater
	5H2	Unit 5-B Feed Heater
	5H3	Unit 5-C Feed Heater
	6H3	BHU Reduction Furnace
	6H1	Unit 6 Hydro Preheater
	7H1-4	Unit 7 Charge Furnace

CONTAMINANTS, EMISSION POINT NUMBERS,
AND SOURCE NAMES

Contaminant (3)	Emission Point No. (1)	Source Name (2)
	7H1-4	Unit 7 No. 1 Reheater
CO SOURCES:		
	7H1-4	Unit 7 No. 2 Reheater
	7H1-4	Unit 7 No. 3 Reheater
	9H1	Crude Oil Heater
	10H1	Crude Oil Heater
	12H1	Mol Sieve Regen Gas Heater
	19H3	19.1 Naphtha HDS Chg Htr
	19H5	19.1 No. 1 Reboiler
	19H5	19.1 No. 2 Reboiler
	19B1/19H1	19.2 Charge Furnace
	19H6	19.2 Platformer Reheater No. 1
	19B1/19H2	19.2 No. 2 Reheater
	19B1/19H2	19.2 No. 3 Reheater
	19B2/19H4	19.3 Charge Furnace
	19B2/19H4	19.3 Frac Feed Furnace
	22H1	Alky Reboiler Furnace
	26H1	Unit 26 DeC4 Reboiler
	28H1	Unit 28 Charge Heater
	29H4	Unit 29 DeC4 Reboiler
	36H1	HDS Unit Charge Heater
	40H1	Unit 40 Superheater No. 1
	41H1 **(PSD)**	Unit 41 Reformer Furnace
	42H1 **(PSD)**	Unit 42 Reactor Chg Htr
	42H2 **(PSD)**	Unit 42 Reactor Chg Htr
	42H3 **(PSD)**	Unit 42 Fract Feed Heater
	50H1	Unit 50 Charge Heater
	51H1	Unit 51 Charge Heater
	50HT1	Coker Heater Tank 1
	50HT2	Coker Heater Tank 2

CONTAMINANTS, EMISSION POINT NUMBERS,
AND SOURCE NAMES

Contaminant (3)	Emission Point No. (1)	Source Name (2)
	50HT3	Coker Heater Tank 3
CO SOURCES:		
	98H1	Unit 98 Reformer Furnace
	7E1	Unit 7 Plat Engine No. 1
	7E2	Unit 7 Plat Engine No. 2
	7E3	Unit 7 Plat Engine No. 3
	7E4	Unit 7 Plat Engine No. 4
	7E5	Unit 7 Plat Engine No. 5
	7E6	Unit 7 Plat Engine No. 6
	12E1	Engine
	12E2	Engine
	12E3	Engine
	12E4	Engine
	12E5	Engine
	12E6	Engine
	12E7	Engine
	55E2	Engine
	93E1	Engine No. 37
	93E2	Engine No. 38
	FWP1-5	Fire Water Pump Engines
	29P1	Unit 29 FCCU Stack
	85B2 **(PSD)**	Unit 40 Boiler **(8/06)**
	40P1	Unit 40 FCCU Stack
	34I1	SRU Incinerator
	43I1 **(PSD)**	SCOT Unit Incinerator
	66FL1	Refinery East HC Flare
	66FL2	Refinery West HC Flare
	66FL3	Refinery Cat Flare
	66FL6	H_2S Emergency Flare
	66FL8	100M Sour Brine Flare Pit

CONTAMINANTS, EMISSION POINT NUMBERS,
AND SOURCE NAMES

Contaminant (3)	Emission Point No. (1)	Source Name (2)
	66FL10	100M Swt Brine Flare Pit
CO SOURCES:		
	66FL11	30M Swt Brine Flare Pit
	66FL12	GOHDS HC Flare
	66FL13	GOHDS Emergency Sulfur Flare
PM SOURCES:		
	F-54-C21	Cooling Twr (Vacuum Unit)
	2H1	Unit 2-2 HDS Charge Htr
	2H2	Deoiler Furnace
	4H1	Unit 4 Feed Heater
	4H2	Unit 4 Dehydrator Heater
	5H1	Unit 5-A Feed Heater
	5H2	Unit 5-B Feed Heater
	5H3	Unit 5-C Feed Heater
	6H3	BHU Reduction Furnace
	6H1	Unit 6 Hydro Preheater
	7E1	Unit 7 Plat Engine No. 1
	7E2	Unit 7 Plat Engine No. 2
	7E3	Unit 7 Plat Engine No. 3
	7E4	Unit 7 Plat Engine No. 4
	7E5	Unit 7 Plat Engine No. 5
	7E6	Unit 7 Plat Engine No. 6
	7H1-4	Unit 7 Charge Furnace
	7H1-4	Unit 7 No. 1 Reheater
	7H1-4	Unit 7 No. 2 Reheater
	7H1-4	Unit 7 No. 3 Reheater
	9H1	Crude Oil Heater
	10H1	Crude Oil Heater
	12E1	Engine No. 41

CONTAMINANTS, EMISSION POINT NUMBERS,
AND SOURCE NAMES

Contaminant (3)	Emission Point No. (1)	Source Name (2)
	12E2	Engine No. 42
PM SOURCES:		
	12E3	Engine No. 43
	12E4	Engine No. 44
	12E5	Engine No. 45
	12E6	Engine No. 46
	12E7	Engine No. 47
	FWP1-5	Fire Water Pump Engines
	12H1	Mol Sieve Regen Gas Heater
	19H3	19.1 Naphtha HDS Chg Heater
	19H5	19.1 No. 1 Reboiler
	19H5	19.1 No. 2 Reboiler
	19B1/19H1	19.2 Charge Furnace
	19H6	19.2 Platformer Reheater No. 1
	19B1/19H2	19.2 No. 2 Reheater
	19B1/19H2	19.2 No. 3 Reheater
	19B2/19H4	19.3 Charge Furnace
	19B2/19H4	19.3 Frac Feed Furnace
	22H1	Alky Reboiler Furnace
	26H1	Unit 26 DeC4 Reboiler
	28H1	Unit 28 Charge Heater
	29H4	Unit 29 DeC4 Reboiler
	36H1	HDS Unit Charge Heater
	40H1	Unit 40 Superheater No. 1
	41H1 **(PSD)**	Unit 41 Reformer Furnace
	42H1 **(PSD)**	Unit 42 Reactor Chg Heater
	42H2 **(PSD)**	Unit 42 Reactor Chg Heater
	42H3 **(PSD)**	Unit 42 Fract Feed Heater
	50H1	Unit 50 Charge Heater
	51H1	Unit 51 Charge Heater

CONTAMINANTS, EMISSION POINT NUMBERS,
AND SOURCE NAMES

Contaminant (3)	Emission Point No. (1)	Source Name (2)
	50HT1	Coker Heater Tank 1
PM SOURCES:		
	50HT2	Coker Heater Tank 2
	50HT3	Coker Heater Tank 3
	98H1	Unit 98 Reformer Furnace
	53R4	Tank Car Track 5
	55E1	Engine No. 1 (East)
	55E2	Engine No. 2 (mid)
	55E3	Engine No. 3 (West)
	29P1	Unit 29 FCCU Stack
	85B2 **(PSD)** (4)	Unit 40 Boiler **(8/06)**
	40P1	Unit 40 FCCU Stack
	93E1	Engine No. 37
	93E2	Engine No. 38
	93E4	Engine No. 40
	34I1	SRU Incinerator
	43I1 **(PSD)**	SCOT Unit Incinerator
	KG47	Sulfur Tank
	F-50A	Coke Handling Fugitives
	VF-1030	PAC Silo
	VF-2030	PAC Silo
	0309	Tank Storage
BENZENE SOURCES:		
	66FL1	Refinery East HC Flare
	66FL2	Refinery West HC Flare
	66FL3	Refinery Cat Flare
	66FL6	H_2S Emergency Flare
	66FL8	100M Sour Brine Flare Pit
	66FL10	100M Swt Brine Flare Pit
	66FL11	30M Swt Brine Flare Pit

CONTAMINANTS, EMISSION POINT NUMBERS,
AND SOURCE NAMES

Contaminant (3)	Emission Point No. (1)	Source Name (2)
BENZENE SOURCES:		
	66FL12	GOHDS HC Flare
	66FL13	GOHDS Emergency Sulfur Flare
	53T1	Refy Tank Truck Loading
	53R2	Tank Car Tracks 1 and 2
	53R3	Tank Car Tracks 3 and 4
	53T2	South Tank Truck Loading
	F-1	Unit 1 Fugitives
	F-2	Unit 2 Columns
	F-2-1	Unit 2.2 Fugitives
	F-2-5	South Fractionators
	F-5	Pentane Isom Fugitives
	F-6	Hexane Isom Fugitives
	F-7	Platformer
	F-9	Unit 9 Fugitives
	F-10	Unit 10 Fugitives
	F-11	Deethanizer Unit Fug
	F-12	Cryogenic Gas Plant Fug
	F-13	Clean-Up Unit Fug
	F-19-1	Naphtha HDS Fugitives
	F-19-2	Reformer Fugitives
	F-23	St Run Fract Fugitives
	F-26	HO FCCU Fract Fugitives
	F-28	Unit 28 Fugitives
	F-29	Gas Oil FCCU 29 Fugitives
	F-32	Unit 32 Fugitives
	F-40	Heavy Oil FCCU Fugitives
	F-42	GOHDS Unit 42 Fugitives
	F-44	Unit 44 Fugitives
BENZENE SOURCES:		

CONTAMINANTS, EMISSION POINT NUMBERS,
AND SOURCE NAMES

Contaminant (3)	Emission Point No. (1)	Source Name (2)
	F-53-1	Refinery Loading Fugitives
	F-53-2	South Loading Rack
	F-54-C2	Cool Twr (Ecodyne No. 9)
	F-54-C3	Cooling Tower (Santa Fe No. 11)
	F-54-C4	Cooling Twr (Mar No. 13)
	F-54-C6	Cooling Twr (Mar No. 10)
	F-54-C7	Cooling Twr (Refy No. 2)
	F-54-C8	Cooling Twr (Refy No. 4)
	F-54-C9	Cooling Twr (Refy No. 7)
	F-54-C10	Cooling Twr (Refy No. 9)
	F-54-C11	Cooling Twr (Refy No. 3)
	F-54-C12	Cooling Twr (Mar No. 12)
	F-54-C13	Cooling Twr (Prt No. 14)
	F-54-C14	Cooling Twr (Mar No. 15)
	F-54-C15	Cooling Twr (Prt No. 16)
	F-54-C16	Cooling Twr (Prt No. 18)
	F-54-C17	Cooling Twr (Refy No. 8)
	F-54-C18	Cooling Twr (Refy No. 13)
	F-54-C19	Cooling Twr (Refy No. 10)
	F-54-C21	Cooling Twr (Vacuum Unit)
	F-54-C20	Cooling Twr (GOHDS No. 17)
	F-56-1-1	West Sump
	F-56-1-3	North Sump
	F-56-1-4-A	Refy Oil/H20 Separators
	F-56-1-6	Storm Water System
	F-56-2	Dixon Creek WWTP
	F-56-1-5	Hazardous Waste Impoundment
	F-56	Unit 56 Fugitives
BENZENE SOURCES:		
	F-66-1	Ref. Flare Area Fugitives

CONTAMINANTS, EMISSION POINT NUMBERS,
AND SOURCE NAMES

Contaminant (3)	Emission Point No. (1)	Source Name (2)
	F-66-2	South Flare Fug
	F-66-3	GOHDS/Cat Area Fugitives
	F-68-1a	GOHDS Storage Fugitives
	F-68-1e	E. Refinery Storage Fugitives
	F-68-1n	N. Refinery Storage Fugitives
	F-68-1r	Rocky Station Fugitives
	F-68-1s	S. Refinery Storage Fugitives
	F-68-1t	Taubman Yard Fugitives
	F-68-1w	W. Refinery Storage Fugitives
	F-68-2n	N. Coble Storage Fugitives
	F-68-2s	S. Coble Storage Fugitives
	F-68-3	West Storage Fugitives
BENZENE SOURCES:		
	F-68-4t	JTF Fugitives
	F-68-5	Gasoline Blending System
	F-85-2	Unit 40 Boiler Fugitives
	0111	Tank Storage
	0202	Tank Storage
	0401	Tank Storage
	0511	Tank Storage
	0514	Tank Storage
	0562	Tank Storage
	0572	Tank Storage
	0573	Tank Storage
	1001	Tank Storage
	1002	Tank Storage
	1003	Tank Storage
BENZENE SOURCES:		
	1006	Tank Storage
	1007	Tank Storage

CONTAMINANTS, EMISSION POINT NUMBERS,
AND SOURCE NAMES

Contaminant (3)	Emission Point No. (1)	Source Name (2)
	1064	Tank Storage
	1163	Tank Storage
	1164	Tank Storage
	1165	Tank Storage
	1522	Tank Storage
	2072	Tank Storage
	2510	Tank Storage
	2553	Tank Storage
	2575	Tank Storage
	2576	Tank Storage
	2577	Tank Storage
	2579	Tank Storage
BENZENE SOURCES:		
	2580	Tank Storage
	2673	Tank Storage
	3001	Tank Storage
	3002	Tank Storage
	4030	Tank Storage
	5505	Tank Storage
	5521	Tank Storage
	5532	Tank Storage
	5550	Tank Storage
	5551	Tank Storage
	5553	Tank Storage
	5554	Tank Storage
	5555	Tank Storage
BENZENE SOURCES:		
	5556	Tank Storage
	5557	Tank Storage
	5558	Tank Storage

CONTAMINANTS, EMISSION POINT NUMBERS,
AND SOURCE NAMES

Contaminant (3)	Emission Point No. (1)	Source Name (2)
	5559	Tank Storage
	5578	Tank Storage
	5580	Tank Storage
	5583	Tank Storage
	5584	Tank Storage
	5591	Tank Storage
	5597	Tank Storage
	5599	Tank Storage
	8001	Tank Storage
	8002	Tank Storage
	8013	Tank Storage
	8031	Tank Storage
	8032	Tank Storage
BENZENE SOURCES:		
	8034	Tank Storage
	9201	Tank Storage
	9500	Tank Storage
	9501	Tank Storage
	9502	Tank Storage
	9503	Tank Storage
H_2S SOURCES:		
	53R4	Tank Car Track 5
	34I1	SRU Incinerator
	43I1	SCOT Unit Incinerator
	66FL1	Refinery East HC Flare
H_2S SOURCES:		
	66FL2	Refinery West HC Flare
	66FL3	Refinery Cat Flare
	66FL6	H_2S Emergency Flare

CONTAMINANTS, EMISSION POINT NUMBERS,
AND SOURCE NAMES

Contaminant (3)	Emission Point No. (1)	Source Name (2)
	66FL8	100M Sour Brine Flare Pit
	66FL10	100M Swt Brine Flare Pit
	66FL11	30M Swt Brine Flare Pit
	66FL12	GOHDS HC Flare
	66FL13	GOHDS Emergency Sulfur Flare
	F-1-6	Unit 1.6 Fugitives
	F-2-1	Unit 2 Fugitives
	F-5	Pentane Isom Fugitives
	F-7	Platformer
	F-9	Unit 9 Fugitives
	F-10	Unit 10 Fugitives
	F-11	Deethanizer Unit Fug
	F-12	Cryogenic Gas Plant Fug
H_2S SOURCES:		
	F-19-1	Naphtha HDS Fugitives
	F-19-3	Distillate HDS Fugitives
	F-23	St Run Fract Fugitives
	F-26	HO FCCU Fract Fugitives
	F-28	Unit 28 Fugitives
	F-29	Gas Oil FCCU 29 Fugitives
	F-32	Unit 32 Fugitives
	F-34	Sulfur Recovery Unit Fug
	F-35	Unit 35 Fugitives
	F-36	Unit 36 Fugitives
	F-40	Heavy Oil FCCU Fugitives
	F-41	Fugitives
H_2S SOURCES:		
	F-42	GOHDS Unit 42 Fugitives
	F-43-1	Sulfur Handling/Storage
	F-44	Fugitives

CONTAMINANTS, EMISSION POINT NUMBERS,
AND SOURCE NAMES

Contaminant (3)	Emission Point No. (1)	Source Name (2)
	F-56-1-4-A	Refy Oil/H20 Separators
	F-56-2	Dixon Creek WWTP
	0309	Tank Storage
	KG47	Tank Storage
	2530	Tank Storage
	3003	Tank Storage
	F-53-1	Refinery Loading Fugitives
	F-53-2	South Loading Rack
	F-66-1	Ref. Flare Area Fugitives
	F-66-2	South Flare Fug
	F-66-3	GOHDS/Cat Area Fugitives
	F-68-1a	GOHDS Storage Fugitives
	F-68-1e	E. Refinery Storage Fugitives
	F-68-1n	N. Refinery Storage Fugitives
	F-68-1r	Rocky Station Fugitives
	F-68-1s	S. Refinery Storage Fugitives
	F-68-1t	Taubman Yard Fugitives
	F-68-1w	W. Refinery Storage Fugitives
	F-68-2n	N. Coble Storage Fugitives
	F-68-2s	S. Coble Storage Fugitives
	F-68-3	West Storage Fugitives
	F-68-4t	JTF Fugitives
	F-68-5	Gasoline Blending System
	F-81	Refinery Boilers
	F-82	South Boilers
	F-85-2	Unit 40 Boiler Fugitives
NH_3 SOURCES:		
	F-56-1-4-A	Refy Oil/H2O Separators
	F-56-2	Dixon Creek WWTP

CONTAMINANTS, EMISSION POINT NUMBERS,
AND SOURCE NAMES

Contaminant (3)	Emission Point No. (1)	Source Name (2)
	3003	Tank Storage
	F-29	Gas Oil FCCU 29 Fugitives
	F-32	Unit 32 Fugitives
	F-40	Heavy Oil FCCU Fugitives
	F-42	GOHDS Unit 42 Fugitives
	F-43-1	Sulfur Handling/Storage
	F-44	Fugitives
	F-53-1	Refinery Loading Fugitives
	F-53-2	South Loading Rack
	F-66-1	Ref. Flare Area Fugitives
	F-66-2	South Flare Fug
	F-66-3	GOHDS/Cat Area Fugitives
	F-68-1a	GOHDS Storage Fugitives
	F-68-1e	E. Refinery Storage Fugitives
	F-68-1n	N. Refinery Storage Fugitives
	F-68-1r	Rocky Station Fugitives
	F-68-1s	S. Refinery Storage Fugitives
	F-68-1t	Taubman Yard Fugitives
	F-68-1w	W. Refinery Storage Fugitives
	F-68-2n	N. Coble Storage Fugitives
	F-68-2s	S. Coble Storage Fugitives
	F-68-3	West Storage Fugitives
	F-68-4t	JTF Fugitives
	F-68-5	Gasoline Blending System
	F-85-2	Unit 40 Boiler Fugitives
	F-98	SMR Fugitives
NH_3 SOURCES		
	29P1	Unit 29 FCCU Stack
	40P1	Unit 40 FCCU Stack

CONTAMINANTS, EMISSION POINT NUMBERS,
AND SOURCE NAMES

Contaminant (3)	Emission Point No. (1)	Source Name (2)
HCl SOURCES:		
	66FL1	Refinery East HC Flare
	66FL2	Refinery West HC Flare
	66FL3	Refinery Cat Flare
	66FL8	100M Sour Brine Flare Pit
	66FL11	30M Swt Brine Flare Pit
	66FL12	GOHDS HC Flare
	66FL13	GOHDS Emergency Sulfur Flare
	F-54-C2	Cooling Tower (Ecodyne No. 9)
	F-54-C3	Cooling Tower (Santa Fe No. 11)
	F-54-C4	Cooling Tower (Marley No. 13)
	F-54-C6	Cooling Tower (Marley No. 10)
HCl SOURCES:		
	F-54-C7	Cooling Tower (No. 2 Refinery)
	F-54-C8	Cooling Tower (No. 4 Refinery)
	F-54-C9	Cooling Tower (No. 7 Refinery)
	F-54-C10	Cooling Tower (No. 9 Refinery)
	F-54-C11	Cooling Tower (No. 3 Refinery)
	F-54-C12	Cooling Tower (Marley No. 12)
	F-54-C13	Cooling Tower (Pritchard No. 14)
	F-54-C14	Cooling Tower (Marley No. 15)
	F-54-C15	Cooling Tower (Pritchard No. 16)
	F-54-C16	Cooling Tower (Pritchard No. 18)
	F-54-C17	Cooling Tower (No. 8 Refinery)
	F-54-C18	Cooling Tower (No. 9 Refinery)
	F-54-C19	Cooling Tower (No. 10 Refinery)
HCl SOURCES:		
	F-54-C20	Cooling Tower (GOHDS No. 17)
	F-54-C21	Cooling Tower (Vacuum Unit)
	F-53-1	Refinery Loading Fugitives

CONTAMINANTS, EMISSION POINT NUMBERS,
AND SOURCE NAMES

Contaminant (3)	Emission Point No. (1)	Source Name (2)
	F-53-2	South Loading Rack
	F-66-1	Ref. Flare Area Fugitives
	F-66-2	South Flare Fug
	F-66-3	GOHDS/Cat Area Fugitives
	F-68-1a	GOHDS Storage Fugitives
	F-68-1e	E. Refinery Storage Fugitives
	F-68-1n	N. Refinery Storage Fugitives
	F-68-1r	Rocky Station Fugitives
	F-68-1s	S. Refinery Storage Fugitives
	F-68-1t	Taubman Yard Fugitives
	F-68-1w	W. Refinery Storage Fugitives
	F-68-2n	N. Coble Storage Fugitives
	F-68-2s	S. Coble Storage Fugitives
HCl SOURCES:		
	F-68-3	West Storage Fugitives
	F-68-4t	JTF Fugitives
	F-68-5	Gasoline Blending System
	F-81	Refinery Boilers
	F-82	South Boilers
	F-85-2	Unit 40 Boiler Fugitives
	F-4	Butane Isom Fugitives
	F-6	Hexane Isom Fugitives
Cl_2 SOURCES:		
	F-54-C2	Cooling Tower (Ecodyne No. 9)
	F-54-C3	Cooling Tower (Santa Fe No. 11)
	F-54-C4	Cooling Tower (Marley No. 13)
Cl_2 SOURCES:		
	F-54-C6	Cooling Tower (Marley No. 10)
	F-54-C7	Cooling Tower (No. 2 Refinery)

CONTAMINANTS, EMISSION POINT NUMBERS,
AND SOURCE NAMES

Contaminant (3)	Emission Point No. (1)	Source Name (2)
	F-54-C8	Cooling Tower (No. 4 Refinery)
	F-54-C9	Cooling Tower (No. 7 Refinery)
	F-54-C10	Cooling Tower (No. 9 Refinery)
	F-54-C11	Cooling Tower (No. 3 Refinery)
	F-54-C12	Cooling Tower (Marley No. 12)
	F-54-C13	Cooling Tower (Pritchard No. 14)
	F-54-C14	Cooling Tower (Marley No. 15)
	F-54-C15	Cooling Tower (Pritchard No. 16)
	F-54-C16	Cooling Tower (Pritchard No. 18)
	F-54-C17	Cooling Tower (No. 8 Refinery)
	F-54-C18	Cooling Tower (No. 9 Refinery)
	F-54-C19	Cooling Tower (No. 10 Refinery)
	F-54-C20	Cooling Tower (GOHDS No. 17)
	F-54-C21	Cooling Tower (Vacuum Unit)
HF SOURCES:		
	F-53-1	Refinery Loading Fugitives
	F-53-2	South Loading Rack
	F-66-1	Ref. Flare Area Fugitives
	F-66-2	South Flare Fug
	F-66-3	GOHDS/Cat Area Fugitives
	F-68-1a	GOHDS Storage Fugitives
	F-68-1e	E. Refinery Storage Fugitives
	F-68-1n	N. Refinery Storage Fugitives
	F-68-1r	Rocky Station Fugitives
	F-68-1s	S. Refinery Storage Fugitives
HF SOURCES:		
	F-68-1t	Taubman Yard Fugitives
	F-68-1w	W. Refinery Storage Fugitives
	F-68-2n	N. Coble Storage Fugitives

CONTAMINANTS, EMISSION POINT NUMBERS, AND SOURCE NAMES

Contaminant (3)	Emission Point No. (1)	Source Name (2)
	F-68-2s	S. Coble Storage Fugitives
	F-68-3	West Storage Fugitives
	F-68-4t	JTF Fugitives
	F-68-5	Gasoline Blending System
	F-81	Refinery Boilers
	F-82	South Boilers
	F-85-2	Unit 40 Boiler Fugitives
	F-22	HF Alkylation Fugitives

(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) Cl_2 - chlorine
CO - carbon monoxide
HCl - hydrogen chloride
HF - hydrogen fluoride
H_2S - hydrogen sulfide
NH_3 - ammonia
NO_x - total oxides of nitrogen
PM - particulate matter, suspended in the atmosphere, including PM_{10}.
PM_{10} - particulate matter equal to or less than 10 microns in diameter, where PM is not listed, it shall be assumed that no PM greater than 10 microns is emitted.
SO_2 - sulfur dioxide
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1

Dated: August 6, 2012