#### EMISSION SOURCES - EMISSIONS CAPS AND INDIVIDUAL EMISSION LIMITATIONS

#### Permit Numbers 9708 and PSDTX861M2

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)

Emission Point No. (1)	Source Name (2)	<u>Emiss</u>	sion Rates * lb/hr
TPY**  VOC CAPS:			
Flares, Vapor Combu Wastewater,	nks, Process Vents, Loading, stors, Fugitives (4), ines, Relief Valves, and	2114	1510
Railcar Rack (L-15), \ Fugitives (F-MSAT ar	S-021, and S-229), New /apor Combustor (FL-7), nd F-MSATLOAD)(4)	25.30	43.39
NO <sub>x</sub> CAPS: (7)			
Process	ares, Vapor Combustors, nes, and Maintenance	490.8	1701
Vapor Combustor (FL	7)	2.33	1.29
CO CAPS:			
Process	ares, Vapor Combustors, nes, and Maintenance	1408	3275

#### **EMISSION SOURCES - EMISSIONS CAPS**

#### AIR CONTAMINANTS DATA

Emission	Source	<u>Emission</u>	n Rates *
Point No. (1)	Name (2)		lb/hr
TPY** Vapor Combustor	(FL-7)	7.17	4.22
SO <sub>2</sub> CAPS:			
Process	s, Flares, Vapor Combustors,	1120	2604
Vents, Loading, E SO <sub>2</sub> SUBCAP: (6	Engines, and Maintenance 6)		
Vapor Combustor	(FL-7)	0.09	0.03
PM CAPS:			
	s, Flares, Vapor Combustors, Engines, and Maintenance	138.0	569.8
BENZENE CAPS	<u>:</u>		
Tanks, Cooling To	owers, Loading, and Fugitives (4)	11.90	18.34
BENZENE SUBC	<b>EAP:</b> (6)		
•	009, and S-021), New Railcar or Combustor (VCU-2), Fugitives ISATLOAD)(4)	9.51	11.94
H₂S CAPS:			
Flares, Process V	ents, Fugitives, and Maintenance	7.60	0.70
SULFURIC ACID	CAPS:		
Process Vents		12.40	54.10

## **CHLORINE CAPS:**

## **EMISSION SOURCES - EMISSIONS CAPS**

Emission	Source	<u>Emissio</u>	n Rates *
Point No. (1)	Name (2)	·	lb/hr
TPY**			
Process Vents		0.40	0.50
<b>HCI CAPS:</b>			
Process Vents a	nd Maintenance	7.10	4.29
T TOCCSS VCTICS O	ind Maintenance	7.10	4.23
NH <sub>3</sub> CAPS:			
Process Vents, I	Eugitives, and Maintenance	800.4	164.8
MAINTENANCE	EMISSIONS CAPS: (5)		
MAINTENANCE	EMISSIONS CALS. (5)		
	VOC	3671.95	46.52
	NO <sub>x</sub>	97.28	2.45
	CO	646.55	7.40
	SO <sub>2</sub>	1768.80	6.13
	$H_2S$	19.31	0.05
	HCI	4.0	0.002
	$NH_3$	700	0.95
	PM	1.98	0.40
-	ITENANCE, STARTUP, and		
SHUTDOWN EN	MISSIONS CAPS: (5)		
	VOC	6475.12	79.64
	NO <sub>x</sub>	97.28	2.45
	CO	646.55	7.40
	SO <sub>2</sub>	1768.80	6.13
	H <sub>2</sub> S	19.31	0.05
	HCI	4.0	0.002
	NH₃	700	0.95
	PM	1.98	0.40

## **EMISSION SOURCES - EMISSIONS CAPS**

Emission	Source	Emission Rates *
Point No. (1)	Name (2)	lb/hr
TPY**	• •	

Emission	Source	Air Contaminant	<u>Emissior</u>	n Rates *
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**
B-10	No. 18 Boiler	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	57.88 34.12 1.21 4.92 1.67	132.51 66.33 3.79 6.77 5.23
B-11	No. 19 Boiler	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	8.73 18.93 1.21 4.72 1.67	38.23 82.93 3.24 6.13 4.47
B-12	600# Boiler	$NO_x$ $CO$ $VOC$ $SO_2$ $PM$	492.85 20.85 1.33 5.84 1.84	172.69 73.05 4.66 11.91 6.43
B-19	300# Steam Boiler #1	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	5.80 13.50 0.89 4.60 1.20	20.30 47.31 3.11 16.28 4.30
B-20	300# Steam Boiler #2	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	5.80 13.50 0.89 4.60 1.20	20.30 47.31 3.11 16.28 4.30
B-21	300# Steam Boiler #3	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	5.80 13.50 0.89 4.60 1.20	20.30 47.31 3.11 16.28 4.30

B-3	No. 10 Boiler	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	23.65 17.80 0.40 2.09 0.56	82.85 22.23 1.41 3.53 1.95
B-4	No. 11 Boiler	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	17.01 7.57 0.48 1.78 0.67	59.59 18.32 1.59 2.35 2.18
B-6	No. 13 Boiler	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	17.24 6.95 0.44 1.81 0.61	60.42 17.59 1.55 2.30 2.14
B-8	No. 15 Boiler	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	40.53 25.20 0.84 3.22 1.17	65.89 46.45 2.34 4.05 3.23
B-9	No. 16 Boiler	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	40.53 12.78 0.84 3.61 1.17	35.14 46.45 2.96 5.57 4.08
H-1	No. 1 Crude Charge Heater	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	31.83 22.44 1.43 7.44 1.98	46.46 91.10 6.26 14.96 8.66
H-11	No. 2 Crude Charge Heater (Anderson)	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	3.25 6.54 0.42 2.17 0.58	14.23 14.11 1.83 4.27 2.52

H-13	Gas Oil Frac. Heater	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	15.69 3.41 0.22 1.13 0.30	68.72 14.95 0.95 1.97 1.32
H-14	Unifiner Charge Heater	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	2.60 2.24 0.14 0.03 0.20	11.39 9.83 0.63 0.11 0.87
H-15	No. 1 Hydrotreater Charge Heater	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	1.63 3.06 0.19 0.84 0.27	7.12 12.00 0.70 1.41 0.96
H-18	C.C.R. Charge Heater	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	13.70 11.30 1.48 7.68 2.04	52.81 19.80 6.47 13.27 8.94
H-2	No. 1 Vacuum Charge Heater	$NO_x$ $CO$ $VOC$ $SO_2$ $PM$	3.53 6.36 0.41 2.11 0.56	15.47 12.75 1.77 3.91 2.45
H-26	No. 2 Vacuum Charge Heater	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	3.60 6.92 0.44 2.29 0.61	15.76 30.30 1.93 4.22 2.67
H-27	"P/P" Mole Sieve Regeneration Heater	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	0.99 0.60 0.04 0.20 0.05	0.76 0.65 0.04 0.22 0.06

H-28	Active Butane Oxygenate Heater	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	1.16 1.00 0.06 0.33 0.09	5.08 3.25 0.28 1.45 0.39
H-30	Asphalt Tank Heaters (5501 and 5502)	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	2.54 0.82 0.05 0.27 0.07	11.12 3.57 0.23 1.18 0.31
H-31B	Tanks 27, 28 Heater	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	0.44 0.14 0.01 0.05 0.01	1.92 0.62 0.04 0.20 0.05
H-32	Tank Heaters ("20MS" and "20M6")	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	0.80 0.56 0.04 0.19 0.05	3.50 2.46 0.16 0.82 0.22
H-32C	Asphalt Tank Heater "20M7"	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	0.33 0.28 0.02 0.09 0.02	1.43 1.23 0.08 0.41 0.11
H-33	Tank Heaters 34, 551, 121, 141, and 552	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	1.99 1.40 0.09 0.46 0.12	8.74 6.16 0.39 2.04 0.54
H-34	C.C.D.R. Stabilizer Reboiler Heater	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	3.08 2.17 0.14 0.68 0.19	20.45 8.68 0.59 1.21 0.81

H-35	Tank "300M2" Heaters (4 Stacks)	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	1.59 1.12 0.07 0.37 0.10	6.99 4.93 0.31 1.63 0.43
H-36	No. 2 Naphtha Hydrotreater Charge Heater	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	1.78 4.86 0.31 1.11 0.43	7.80 5.72 0.97 1.70 1.34
H-37	No. 2 Naphtha Hydrotreater Des2 Reboiler	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	6.40 2.41 0.16 0.30 0.22	15.97 9.59 0.65 1.21 0.89
H-38	#2 Reformer Charge Heater	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	13.58 29.45 1.88 6.73 2.59	59.46 81.85 5.02 10.28 6.93
H-39	#2 Reformer Stabilizer Reboiler Heater	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	2.92 2.06 0.13 0.63 0.18	12.78 6.59 0.44 0.89 0.60
H-40	P.D.A. Asph. Htr.	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	8.49 5.61 0.36 1.40 0.49	37.17 5.11 1.00 1.59 1.37
H-41	No. 2 Crude Charge Heater	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	16.40 26.18 1.67 8.36 2.31	71.83 13.21 6.99 14.12 9.66

H-42	Hydrocracker Recycle Heater	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	3.49 7.20 0.46 2.39 0.63	15.28 12.64 1.98 2.99 2.73
H-43	Hydrocracker "DEC4" Reboiler Heater	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	3.31 7.37 0.47 2.36 0.65	14.49 11.77 1.85 3.84 2.55
H-45	#1 Hydrotreater Charge Heater	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	2.66 5.93 0.35 0.89 0.48	11.67 4.82 0.73 1.44 1.01
H-46	C.C.R. Interheater	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	7.48 13.76 0.88 4.56 1.21	32.77 60.27 3.84 8.79 5.31
H-47	Asphalt Blowstill Heater	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	0.90 1.02 0.06 0.27 0.09	3.95 2.89 0.21 0.35 0.28
H-48	Turbine Fuel HDSU Heater	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	3.78 8.88 0.57 2.94 0.78	16.55 14.24 2.45 4.26 3.38
H-51	Asphalt Tank Heater 300M3 (4 Stacks)	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	0.53 1.12 0.07 0.37 0.10	2.33 4.93 0.31 1.63 0.43

H-6	Dago Heater	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	3.39 2.32 0.15 0.60 0.21	14.87 6.22 0.44 0.71 0.59
H-64	No. 4 Hydrotreater Charge Heater	$NO_x$ $CO$ $VOC$ $SO_2$ $PM$	1.26 2.81 0.18 0.86 0.25	5.54 12.33 0.71 1.34 0.96
H-70	No. 2 Crude Charge Heater	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	4.25 9.90 0.66 3.40 0.90	18.63 43.40 2.87 14.90 3.97
H-71	No. 3 Vacuum Heater	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	2.13 5.00 0.30 1.70 0.45	6.06 14.10 0.90 4.80 1.29
H-72	PDA Asphalt Heater	$NO_x$ $CO$ $VOC$ $SO_2$ $PM$	1.55 3.60 0.20 1.20 0.30	6.78 15.80 1.00 5.40 1.40
H-73	No. 3 Crude Heater- Petrochem (North)	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	3.80 8.80 0.60 3.00 0.80	16.52 38.40 2.50 13.20 3.50
H-74	Hydrocracker Recycle Heater	$NO_x$ $CO$ $VOC$ $SO_2$ $PM$	4.20 8.10 0.50 2.80 0.70	15.25 35.50 2.30 12.20 3.20

H-75	Hydrocracker "DEC4" Reboiler Heater	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	3.80 7.40 0.50 2.60 0.70	13.98 32.50 2.20 11.20 3.00
H-76	Diesel Hydrotreater Charge Heater	$NO_x$ $CO$ $VOC$ $SO_2$ $PM$	2.01 4.86 0.31 1.61 0.43	8.81 21.29 1.36 7.06 1.88
H-77	No. 1 Reformer Charge Heater	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	12.29 28.60 1.89 9.83 2.62	53.82 125.26 8.29 43.04 11.46
H-78	No. 1 Reformer Interheaters	$NO_x$ $CO$ $VOC$ $SO_2$ $PM$	3.67 8.55 0.57 2.94 0.78	16.09 37.46 2.48 12.87 3.43
H-79	No. 1 Ref. Stabilizer Reboiler	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	1.16 2.70 0.18 0.93 0.25	5.08 11.83 0.78 4.06 1.08
H-8	HCU Fractionation Charge Heater	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	4.69 7.22 0.48 1.93 0.66	20.52 28.77 1.42 3.69 1.96
H-80	FCC Gas HDS Charge Heater	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	3.05 8.33 0.53 2.33 0.73	13.36 36.46 2.32 5.03 3.21

H-81	C4 ISOM Heater	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	0.31 0.70 0.05 0.20 0.07	1.36 3.20 0.20 1.09 0.29
H-82	Coker Heater	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	5.80 13.50 0.89 4.60 1.20	25.40 59.10 3.90 20.30 5.40
H-83	Polymer Modified Asphalt Heater	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	0.39 0.90 0.06 0.30 0.08	1.69 3.90 0.26 1.36 0.36
H-84	No. 2 Reformer No. 1 Interheater	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	3.79 8.80 0.58 3.00 0.80	16.60 38.60 2.56 13.30 3.50
H-85	No. 2 Ref. Stab. Reboiler	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	1.52 3.50 0.20 1.20 0.30	6.67 15.50 1.00 5.30 1.40
H-86	No. 2 Naphtha Hydrotreater Charge Heater (Final)	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	2.00 4.70 0.30 1.60 0.40	8.81 20.50 1.40 7.00 1.90
H-87	SRU No. 3 Hot Oil Heater	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	0.72 1.70 0.10 0.58 0.15	3.15 7.30 0.49 2.50 0.67

# EMISSION SOURCES - INDIVIDUAL EMISSION RATE LIMITS AND SUBCAPS

H-88	Acid Plant Feed Heater	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	0.79 0.48 0.03 0.16 0.04	3.46 0.43 0.03 0.50 0.04
H-9	No. 3 Crude Heater- Petrochem (South)	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	13.08 7.48 0.37 1.36 0.51	57.31 6.99 1.22 2.16 1.68
F-20	No. 1 Refinery Cooling Tower	VOC	2.62	11.46
F-21	Gasoline Plant Cooling Tower (4)	VOC	1.75	7.68
F-47	No. 2 Refinery Cooling Tower	VOC	1.29	5.63
F-93	No. 3 Refinery Cooling Tower	VOC	1.89	8.28
E-7	Unifiner Engine (Clark)	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	4.56 0.56 0.17 0.01 0.07	19.98 2.44 0.76 0.01 0.29
FL-9	Brine Degas Drum Flare	NO <sub>x</sub> CO VOC SO <sub>2</sub>	8.21 16.38 30.15 0.01	0.99 1.98 5.52 0.01
FL-1	No. 1 Main Refinery Flare	NO <sub>x</sub> CO VOC SO <sub>2</sub>	3.65 18.58 11.51 1.65	8.52 43.43 27.47 1.17

## EMISSION SOURCES - INDIVIDUAL EMISSION RATE LIMITS AND SUBCAPS

FL-3	FCCU Flare	NO <sub>x</sub> CO VOC SO <sub>2</sub>	14.16 102.25 238.28 3.99	5.75 41.37 71.79 0.77
FL-8	Flare FL-8	NO <sub>x</sub> CO VOC SO <sub>2</sub>	2.42 12.35 7.85 1.10	7.97 40.60 25.75 1.09
FL-4	HCU Flare	NO <sub>x</sub> CO VOC SO <sub>2</sub>	1.34 6.85 4.90 1.10	4.43 22.55 16.06 1.09
FL-6	Wastewater Flare	NO <sub>x</sub> CO VOC SO <sub>2</sub>	1.90 9.70 4.54 3.41	4.17 21.26 9.95 1.21

F-1CRUDE, F- 1REF_HT, F-2ALKY, F-2CRUDE, F- 2REF_HT, F-3CRUDE, F-4HT, F-85, F-ALKY_PDA, F-ASPHALT, F-BRINE, F-C4ISOM, F-CASING, F-CAVERN, F-COKE_VOC, F-DESALT, F-DHDSU, F-ETNKFRM, F-FCCU, F-GASBLD, F- GASPLT, F-GHDS, F- HCU, F-HDS_GOF, F- LPG, F-IOCTENE, F-NBULKLD, F-NTNKFRM, F-ORU, F-PENEX, F-PMA, F-PSA, F-PUMPSTA, F-RAILLOAD, F-RLE, F-SBULKLD, F-SRU1, F-SRU2, F-SRU3, F-SWS, F-UNIFINER, F-WTNKFRM, F-WTNKFRM, F-WWTP, F-MSAT, F-MSATLOAD	VOC Subcap for Fugitives (4)	VOC	157.56	690.11
F-Coke_PM	Coker PM Fugitives	PM	0.41	1.35
FL-7	Loading Rack Vapor Combustor	NO <sub>x</sub> CO VOC SO <sub>2</sub>	9.53 26.30 26.52 0.13	11.06 29.46 20.25 0.05
L-11	Truck Loading Rack	VOC	11.05	2.12
L-13	Railcar Loading Rack	VOC	0.25	0.10
L-14	North Railcar Rack	VOC	18.35	0.81

# EMISSION SOURCES - INDIVIDUAL EMISSION RATE LIMITS AND SUBCAPS

L-2	Asphalt Truck Loading Rack	VOC	4.49	2.28
L-5	Railcar Rack (Diesel)	VOC	3.41	1.83
L-7	Asphalt Railcar Rack	VOC	0.42	1.37
V-29	Sulfuric Acid Plant Vent	SO <sub>2</sub>	21.67	70.17
V-22	Asphalt Blowstill Vent	$NO_x$ $CO$ $VOC$ $SO_2$ $PM$	2.15 42.37 2.15 2.16 7.18	3.78 74.33 3.78 4.35 12.60
V-20	F.C.C.U. (Fluidized Catalytic Cracking Unit)	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	220.06 33.49 10.52 459.26 80.00	193.34 115.73 36.37 1255.58 342.49
V-18	No. 1 Reformer Cat Regenerator Vent	CO VOC	3.27 0.62	14.31 2.72
V-21	No. 2 Reformer Cat Regenerator Vent	CO VOC	70.00 0.03	3.36 0.08
V-13	Soda Ash Silo	PM	0.01	0.01
V-14	Lime Silo Vent	PM	0.01	0.01
V-17	FCC Catalyst Silo Vent	PM	0.01	0.01
V-5	SRU No. 1 Incinerator	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	0.40 1.37 0.12 6.87 0.03	1.75 5.98 0.53 21.54 0.13

# EMISSION SOURCES - INDIVIDUAL EMISSION RATE LIMITS AND SUBCAPS

V-16	SRU No. 2 Incinerator	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	0.56 13.66 0.20 10.96 0.04	2.45 59.82 0.87 48.01 0.18
V-28	SRU No. 3 Incinerator	NO <sub>x</sub> CO VOC SO <sub>2</sub> PM	1.60 5.02 0.54 28.69 0.12	7.01 21.99 2.38 125.64 0.52
S-044	Tank 144	Caustic	0.01	0.01
S-142	Tank 232	Caustic	0.01	0.01
CARBON CAN	Carbon Canister System Fugitives (CAS1 - CAS7)	VOC	5.04	11.04
S-001, S-002, S-003, S-004, S-005, S-006, S-007, S-008, S-009, S-010, S-011, S-012, S-013, S-014, S-015, S-016, S-017, S-018, S-019, S-020, S-021, S-022, S-023, S-024, S-025, S-026, S-027, S-028, S-031, S-032, S-033, S-035, S-037, S-038, S-039, S-040, S-042, S-043, S-045, S-046, S-049, S-052, S-053, S-055, S-056, S-057, S-058, S-059, S-060, S-063, S-064, S-065, S-066, S-067, S-068, S-069, S-070, S-071, S-072, S-073, S-074, S-075, S-076, S-086, S-090, S-095, S-137, S-138, S-139, S-140, S-141, S-143, S-	Subcap for Storage Tanks	VOC	141.70	380.94

#### AIR CONTAMINANTS DATA

- (1) Emission point identification either specific equipment designation or emission point number (EPN) 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 § 101.1.

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

CO - carbon moNOxide

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

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

HCl - hydrogen chloride

NH<sub>3</sub> - ammonia

PM - particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5.</sub>

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

PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter

- (4) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations
- (5) In accordance with Special Condition No. 59, the maintenance emission caps become effective on December 15, 2010. The interim maintenance emission caps are effective from June 17, 2010 through December 15, 2010.
- (6) The emission rates listed for the VOC, NO<sub>x</sub>, and CO subcaps are included in the total VOC, NO<sub>x</sub>, and CO cap for the site. These subcaps were established to establish that the Benzene Concentrate Extraction System project was not subject to PSD review.
- (7) The emission caps have been carried forward from the flexible permit and do not include MSS emissions. The only emission caps that are limiting (lower than the sum of the subcaps and individual emission rate limits for that air contaminant) are those for NO<sub>x</sub>.
- \* Emission rates are based on operating 8,760 hrs/year.
- \*\* Compliance with annual emission limits is based on a rolling 12-month period.

Dated December 16, 2010