EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSIONS LIMITATIONS

Flexible Permit Numbers 6825A, PSD-TX-49, and N65

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. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

See Attachment 1 for list of Emission Point Numbers and Source Descriptions for emission points included in each Source Category.

VOC EMISSION CAP

Source Categories	Year	lb/hr	TPY **
Cooling Towers,	1996	3,914	2,851
FCCU,	1997	3,911	2,859
Fired Units,	1998	3,897	2,873
Flares,	1999	3,812	2,612
Fugitives (4),	2000	801	2,208
Marine Loading,	2001	690	1,771
Storage Tanks,	2002	647	1,582
Sulfur Recovery Units,	2003	651.40	1,505
COEXII, and	2004	592.40	1,319
DCU-844		2005	600.40
1,352			
	2006 (5)	592.18	1,323.58
	2008 (6)	590.95	1,318.18
	2010 (9)	590.95	1,318.18
	2011 (10)	596.81	1,343.10

VOC EMISSION CAP FOR SOURCES PERMITTED UNDER NONATTAINMENT PERMIT NUMBER N65

COEXII and DCU-844	2010 (9) (10)	41.14	124.18

EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSIONS LIMITATIONS

NO_x EMISSION CAP

Source Categories	Year	lb/hr	TPY **
FCCU,	1996	3,458	15,146
Fired Units,	1997	3,458	15,146
Flares,	1998	2,873	12,583
Marine Loading,	1999	2,523	11,050
Sulfur Recovery Units,	2000	2,352	10,263
COEXII, and	2001	1,609	7,012
DCU-844		2002	1,405
6,117			
	2003	1,417.72	6,080
	2004	1,351.72	5,795
January 1 through April 15	2005	986.72	4,187
After April 15, 2005	2005	986.72	4,018
After March 9, 2006	2006 (5)	971.47	3,649.19
	2008 (6)	901.88	3,344.39
	2010 (9)	911.58	3,378.59
	2010 (11)	911.58	3,185.39
	2011 (10)	918.18	3,404.87
	2011 (11)	918.18	3,211.67

SO_2 EMISSION CAP

Source Categories	Year	lb/hr	TPY **
FCCU,	1996	1,475	6,459
Fired Units,	1997	1,394	6,105
Flares,	1998	1,347	6,064
Marine Loading,	1999	1,347	6,064
Sulfur Recovery Units,	2000	1,338	6,026
COEXII, and	2001	1,325	5,896
DCU-844		2002	1,353
5,948			
	2003	1,599.59	6,915
	2004	1,578.59	6,915
January 1 through April 15	2005	1,578.59	6,915
After April 15	2005	832.59	2,547
	2006 (5)	828.09	2,527.38

EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSIONS LIMITATIONS

2008 (6)	816.29	2,475.98
2010 (9)	827.39	2,490.88
2010 (11)	827.39	2,476.68
2011 (10)	840.86	2,509.01
2011 (11)	840.86	2,494.81

CO EMISSION CAP

Source Categories	Year	lb/hr	TPY **
FCCU,	1996	1,299	5,690
Fired Units,	1997	1,299	5,690
Flares,	1998	1,271	5,569
Marine Loading,	1999	1,276	5,588
Sulfur Recovery Units,	2000	1,277	5,519
COEXII, and	2001	1,276	5,513
DCU-844		2002	1,278
5,522			
	2003	1,492.20	6,164
	2004	1,492.20	6,164
January 1 through April 15	2005	969.20	4,164
After April 15	2005	969.20	4,124
	2006 (5)	959.28	4,120.51
	2008 (6)	924.48	3,968.11
	2010 (9)	954.68	4,028.31
	2010 (11)	954.68	4,016.41
	2011 (10)	989.85	4,098.33
	2011 (11)	989.85	4,086.43

PM_{10} EMISSION CAP

Source Categories	Year	lb/hr	TPY **
Coke,	1996	153	671
FCCU,	1997	153	671
Fired Units,	1998	150	656
Sulfur Recovery Units,	1999	150	656
COEXII, and	2000	148	647
DCU-844	2001	148	647

EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSIONS LIMITATIONS

	2002	150	659
	2003	179.03	725
	2004	179.03	725
January 1 through April 15	2005	179.03	725
After April 15	2005	141.03	605
	2006 (5)	139.15	597.41
	2008 (6)	134.75	578.41
	2010 (9)	138.05	589.61
	2011 (10)	143.84	605.04

H_2S EMISSION CAP

Source Categories	Year	lb/hr	TPY **
Flares,	1996	5.7	25.1
Fugitive (4),	1997	5.7	25.1
Land Loading,	1998	4.6	20.0
Sulfur Recovery Units, and	1999	3.5	15.0
COEXII, and	2000	2.5	10.0
DCU-844	2001	1.3	5.0
	2002	1.3	5.0
	2003	5.24	14.1
	2004	4.24	10.5
	2005	4.24	8.9
	2010 (9)	4.48	9.92

HF EMISSION CAP

Source Categories	Year	lb/hr	TPY **
Fired Units and	1996 (Initial)	0.5	2.4
Fugitives (4)	1997	0.5	2.4
	1998	0.5	2.4
	1999	0.5	2.4
	2000	0.5	2.4
	2001	0.5	2.4
	2002	0.5	2.4
	2003	0.5	2.4
	2004	0.5	2.4
	2006 (5)	0.36	1.79

EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSIONS LIMITATIONS

NH_3 EMISSION CAP

Source Categories	Year	lb/hr	TPY **
Fugitives (4), Storage Tanks, COEXII, and DCU-844 0.2	1996 (Initial)	0.1	0.2
	1997	0.1	0.2
	1998	0.1	0.2
	1999	0.1	0.2
	2000	0.1	0.2
	2001	0.1	0.2
	2002	0.1	0.2
	2003	0.1	0.2
	2004	0.1	0.2
	2010 (9)	1.43	4.87
	2010 (11)	9.33	39.07
	2011 (10)	3.57	13.37
	2011 (11)	11.47	47.57

SPECIATED VOC EMISSION CAPS

Benzene CAP

Source Categories	Year	lb/hr	TPY **
Flares, Fugitives (4), Marine Loading, Storage Tanks, COEXII, DCU-844 9.7	1996	11.6	14.9
	1997	10.9	11.6
	1998	10.9	11.5
	1999	10.8	11.3
	2000	10.8	11.2
	2001	2.9	9.7
	2002	2.9	9.7
	2003	2.91	9.74
	2004	2.91	9.74

EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSIONS LIMITATIONS

MTBE CAP

Source Categories **	Year	lb/hr	TPY
Fugitives (4), Marine Loading, Storage Tanks, and COEXII	1996	19.2	31.1
	1997	19.2	31.1
	1998	19.2	31.1
	1999	19.2	31.1
	2000	13.2	30.4
	2001	13.2	30.4
	2002	13.2	30.4
	2003	13.2	30.4
	2004	13.2	30.4

INDIVIDUAL EMISSIONS LIMITATIONS

EPN	Source Name	Air Contaminant (3)	lb/hr	TPY **
E-01-WGS	Wet Gas Scrubber	NO_x (7)		271.93
E-01-245	HTU-245 Reactor Heater	VOC	0.18	0.77
		NO_x	1.44	6.31
		SO_2	0.85	3.73
		CO	2.48	10.84
		PM_{10}	0.24	1.07
F-Pipe	Piping Fugitives (4)	VOC	0.18	0.78
F-245	HTU 245 fugitives	VOC	1.32	5.78

EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSIONS LIMITATIONS

ROUTINE MAINTENANCE, START-UP, AND SHUTDOWN EMISSIONS

EPN	Source Name	Air Contaminant (3)	lb/hr	TPY **
E-20-Flare	Flare No. 20 MSS Emissions	VOC	0.06	0.28
		NO_x	0.87	3.81
		SO_2	0.80	3.50
		CO	2.40	10.50
E-01-1241	FCCU-1241 Boiler B-103A MSS Emissions	VOC	0.1	0.4
		NO_x	0.2	0.9
		SO_2	0.01	0.01
		CO	0.2	0.9
		PM_{10}	0.1	0.4
E-02-1241	FCCU-1241 Boiler B-103B MSS Emissions	VOC	0.1	0.4
		NO_x	0.2	0.9
		SO_2	0.01	0.01
		CO	0.2	0.9
		PM_{10}	0.1	0.4

(1) Emission point identification - either specific equipment designation or emission point number from a plot plan per Attachment 1.
(2) Specific point source names. 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
CO - carbon monoxide
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 in emitted.
H_2S - hydrogen sulfide
HF - hydrogen fluoride
NH_3 - ammonia
MTBE - methyl-tert-butyl ether
(4) Emission rate is an estimate and compliance is demonstrated by meeting the requirements of the applicable special conditions and permit application representations.

EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSIONS LIMITATIONS

(5) Reduction in 2006 allowables due to removal of start-up emissions from FCCU-1241 Heaters B-103A and B-103B from Caps; dismantling of FCCU-1241 Heater B-103C; Tank 2109 no longer belonging to permit holder; voluntary reduction of 362 tons per year of NO_x emissions from Emission Point No. (EPN) E-01-WGS; and reduction of emissions from supplemental fuel for CO9 Boiler.
Note: Reduction of NO_x and CO emissions from the shutdown of the CO9 Boiler were previously reflected in the caps.

(6) After planned shutdown of EPNs E-04-18BH and E-05-18BH.

(7) Emission limit for NO_x emissions from wet gas scrubber after March 9, 2006. This limit is to make emission reductions enforceable so that permit holder can claim Emission Reduction Credits.

(8) Reserved.

(9) Emissions from COEXII EPNs to be included in source caps beginning in 2010; VOC emissions from COEXII EPNs covered under Nonattainment Permit Number N65.

(10) Emissions from DCU-844 EPNs to be included in source caps beginning in 2011; VOC emissions from DCU-844 EPNs covered under Nonattainment Permit Number N65.

(11) Emissions valid after the requirements of Special Condition number 26 have been completed.

** Compliance with annual emission limits is based on a calendar basis through December 31, 2004, and on a 12-month rolling average thereafter.

Dated November 26, 2008