

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES
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Permit Nos. 9868A and PSD-TX-102M4

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 I for Source Name and Emission Point Number Index.

VOC EMISSION CAP

Source Name	Year	lb/hr	TPY
Flares	1995 (Initial)	11071	10202
Fired Units (Furnaces, Heaters, Boilers, etc.)	1996	10978	10134
FCCU CO Boilers	1997	10776	9912
Engines	1998	8908	9795
Cooling Towers	1999	4941	9374
Wastewater (4)	2000	4753	8898
Tanks	2001	4207	7144
Truck and Rail Loading	2002	4065	6733
Fugitives (4)	2003	3771	6362
Incinerators	2004	3445	5970
Vents (56V1)	2005	3139	5682
	2006 (Final)	2358	5213

NO_x EMISSION CAP

Source Name	Year	lb/hr	TPY
Flares	1995 (Initial)	2082	4632
Fired Units (Furnaces, Heaters, Boilers, etc.)	1996	2014	4632
FCCU CO Boilers	1997	1957	4632
Engines	1998	1957	4632
Incinerators	1999	1843	4452
	2000	1735	3882
	2001	1639	3329
	2002	1590	3115

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2003	1519	2802
2004	1519	2804
2005	1519	2810
2006 (Final)	1626	2908
SO ₂ EMISSION CAP		

Source Name	Year	lb/hr	TPY
Flares	1995 (Initial)	7128	12740
Fired Units (Furnaces, Heaters, Boilers, etc.)	1996	7004	12560
FCCU CO Boilers	1997	6880	12016
Engines	1998	6880	12017
Incinerators	1999	6877	12015
Sulfur Handling	2000	6860	11960
Fugitives (4)	2001	6647	11927
Wastewater (4)	2002	6647	11927
	2003	6647	11927
	2004	6648	11928
	2005	6648	11929
	2006 (Final)	6853	5201

CO EMISSION CAP

Source Name	Year	lb/hr	TPY
Flares	1995 (Initial)	1285	5305
Fired Units (Furnaces, Heaters, Boilers, etc.)	1996	1295	5305
FCCU CO Boilers	1997	1302	5305
Engines	1998	1302	5305
Incinerators	1999	1260	5305
	2000	1216	5250
	2001	1161	4966
	2002	1164	4942
	2003	1168	4906
	2004	1173	4909
	2005	1175	4918
	2006 (Final)	1250	5247

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PM EMISSION CAP

Source Name	Year	lb/hr	TPY
Flares	1995 (Initial)	271	1129
Fired Units (Furnaces, Heaters, Boilers, etc.)	1996	271	1129
FCCU CO Boilers	1997	271	1129
Engines	1998	271	1129
Incinerators	1999	271	1129
	2000	267	1129
	2001	261	1130
	2002	261	1130
	2003	261	1130
	2004	261	1130
	2005	261	1124
	2006 (Final)	261	1116

H₂S EMISSION CAP

Source Name	Year	lb/hr	TPY
Flares	1995 (Initial)	128	307
Fired Units (Furnaces, Heaters, Boilers, etc.)	1996	126	299
FCCU CO Boilers	1997	125	292
Incinerators	1998	128	305
Sulfur Handling	1999	120	243
Fugitives (4)	2000	112	210
Wastewater (4)	2001	50	115
Vent (32V1)	2002	50	115
Tank (3003)	2003	50	115
	2004	45	110
	2005	45	111
	2006 (Final)	45	104

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HCl EMISSION CAP

Source Name	Year	lb/hr	TPY
Flares Fugitives (4)	1995 (Initial)	13	30
	1996	13	30
	1997	12	28
	1998	12	28
	1999	12	28
	2000	12	28
	2001	5.7	25
	2002	5.7	25
	2003	5.7	25
	2004	5.7	25
	2005	5.7	25
	2006 (Final)	5.7	25

NH₃ EMISSION CAP

Source Name	Year	lb/hr	TPY
Fugitives (4) Wastewater (4) Vent (32V1) Tank (3003)	1995 (Initial)	82	355
	1996	82	355
	1997	82	355
	1998	82	355
	1999	5	7
	2000	5	6
	2001	5	6
	2002	5	6
	2003	5	6
	2004	5	6
	2005	5	6
	2006 (Final)	5	6

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES
HF EMISSION CAP

Source Name	Year	lb/hr	TPY
Fugitives (4)	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	0.56	2.44
	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 (Final)	0.43	1.9

SPECIATED VOC EMISSION CAPS

Benzene CAP

Source Name	Year	lb/hr	TPY
Flares	1995 (Initial)	47	78
Tanks	1996	45	75
Truck and Rail Loading	1997	42	68
Fugitives (4)	1998	41	67
Wastewater (4)	1999	22	65
	2000	13	41
	2001	11	36
	2002	11	35
	2003	11	34
	2004	10	34
	2005	10	34
	2006 (Final)	9.2	32

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES
Cyclohexane CAP

Source Name	Year	lb/hr	TPY
Flares	1995 (Initial)	828	316
Tanks	1996	827	316
Truck and Rail Loading	1997	813	268
Fugitives (4)	1998	308	223
Wastewater (4)	1999	104	211
	2000	87	170
	2001	76	123
	2002	76	122
	2003	75	119
	2004	68	112
	2005	68	112
	2006 (Final)	60	101

Ethylbenzene CAP

Source Name	Year	lb/hr	TPY
Flares	1995 (Initial)	15	61
Tanks	1996	15	61
Fugitives (4)	1997	15	61
Wastewater (4)	1998	14	60
	1999	13	55
	2000	12	50
	2001	2.3	8.4
	2002	2.3	8.3
	2003	2.3	8.3
	2004	2.2	8.3
	2005	2.2	8.2
	2006 (Final)	2.2	8.2

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES
Hexane CAP

Source Name	Year	lb/hr	TPY
Flares	1995 (Initial)	1353	400
Tanks	1996	1353	399
Truck and Rail Loading	1997	1333	368
Fugitives (4)	1998	576	350
Wastewater (4)	1999	163	341
	2000	138	303
	2001	103	151
	2002	102	147
	2003	98	130
	2004	98	128
	2005	97	127
	2006 (Final)	96	121

Toluene CAP

Source Name	Year	lb/hr	TPY
Flares	1995 (Initial)	104	110
Tanks	1996	103	106
Fugitives (4)	1997	102	102
Wastewater (4)	1998	76	101
	1999	29	97
	2000	26	87
	2001	21	63
	2002	21	61
	2003	21	61
	2004	20	61
	2005	20	61
	2006 (Final)	18	56

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES
Xylene CAP

Source Name	Year	lb/hr	TPY
Flares	1995 (Initial)	15	67
Tanks	1996	14	63
Fugitives (4)	1997	14	63
Wastewater (4)	1998	13	63
	1999	13	60
	2000	11	51
	2001	9.2	45
	2002	9.1	45
	2003	9.1	45
	2004	8.9	45
	2005	8.4	44
	2006 (Final)	8.3	44

- (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 30 Texas Administrative Code 101.1
 NO_x - total oxides of nitrogen
 SO₂ - sulfur dioxide
 PM - particulate matter
 CO - carbon monoxide
 H₂S - hydrogen sulfide
 HCl - hydrogen chloride
 NH₃ - ammonia
 HF - hydrogen fluoride
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.

Emission rates are based on and the facilities are limited by the following maximum operating schedule:

Hrs/day____Days/week____Weeks/year____or Hrs/year 8,760

Dated _____