EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 20686

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.

		AIR CONTAMINANTS DATA		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
CTCOOLT03	Cooling Tower No. 2	VOC	0.13	0.55
CTCOOLT04	Cooling Tower No. 3	VOC	0.17	0.74
CTCOOLT05	Cooling Tower No. 6	VOC	0.13	0.55
EEFIREWA02	P-175 Engine	VOC	0.28	0.12
		NO_x	3.57	1.52
		CO	0.77	0.33
		SO_2	0.24	0.10
		PM	0.25	0.11
EEFIREWB02	P-2 Engine	VOC	0.57	0.24
		NO_x	7.13	3.03
		CO	1.54	0.65
		SO_2	0.47	0.20
		PM	0.51	0.22
FCWELL04	Material Handling Fugitives (4)	PM	0.01	0.01
FECUIIP04	335 Unit Flare (10)	VOC	2.26	3.47
		NO_x	1.21	4.01
		CO	6.30	22.56
		SO_2	0.91	4.00
FECUIIP04	335 Unit Decoking (10)	CO	1.93	0.58
		PM	0.43	0.24
FEEVFL02	314 Unit Flare (8)	VOC	1.90	5.24
		NO_x	0.34	1.14
		CO	1.35	4.52
		SO_2	2.60	7.13

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
FETKFLR02	Tank Vent Flare (8)	VOC	78.32	15.92
		NO_x	9.95	1.98
		CO	19.06	3.95
		HCl	1.26	0.26
		SO_2	0.23	0.02
	Tank Vent Flare (9)	VOC	17.23	5.40
		NO_x	2.15	1.37
		CO	4.30	2.73
		HCl	0.33	0.13
		SO_2	0.01	0.01
FU1DU01	346 Unit Fugitives (4)	VOC (10)	0.02	0.09
		VOC (11)	0.02	0.10
FU4BOLS01	No. 4 Boiler System Fugitives (4)	VOC	0.01	0.04
FUBARGE01	Barge Fugitives (4)	VOC	0.01	0.01
FUBAYOU01	Bayou Tank Farm Fugitives (4)	VOC (10)	0.03	0.13
		VOC (11)	0.01	0.03
FUC09DU01	345 Unit Fugitives (4)	VOC (10)	0.08	0.36
		VOC (11)	0.02	0.08
FUC21DU01	343 Unit Fugitives (4)	VOC (10)	0.03	0.14
		VOC (11)	0.02	0.10
FUC25DU01	342 Unit Fugitives (4)	VOC (10)	0.02	0.08
		VOC (11)	0.03	0.11
FUC27DU01	341 Unit Fugitives (4)	VOC (10)	0.02	0.10
		VOC (11)	0.04	0.16
FUC33DU01	344 Unit Fugitives (4)	VOC (10)	0.02	0.08
		VOC (11)	0.04	0.15

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
FUC35DU01	347 Unit Fugitives (4)	VOC (10)	0.02	0.08
		VOC (11)	0.07	0.30
FUCAS1201	CA Storage Area 12 Fugitives (4)	VOC	0.01	0.02
FUCAS1601	CA Storage Area 16 Fugitives (4)	VOC	0.01	0.05
FUCAS1701	CA Storage Area 17 Fugitives (4)	VOC (10)	0.01	0.01
		VOC (11)	0.01	0.02
FUCRS19A01	Crude Acid Storage Area Fugitives (4)	VOC	0.01	0.01
FUCAS19B01	CA Storage Area 19B Fugitives (4)	VOC	0.02	0.08
FUCAS29A01	CA Storage Area 29A Fugitives (4)	VOC	0.01	0.02
FUCAS33B01	CA Storage Area 33B Fugitives (4)	VOC (10)	0.01	0.06
		VOC (11)	0.01	0.04
FUCAS33C01	CA Storage Area 33C Fugitives (4)	VOC (10)	0.01	0.02
		VOC (11)	0.01	0.01
FUCAS33D01	CA Storage Area 33D Fugitives (4)	VOC	0.01	0.03
FUCAS33E01	CA Storage Area 33E Fugitives (4)	VOC (10)	0.01	0.03
		VOC (11)	0.01	0.01
FUCAS9701	CA Storage Area 97 Fugitives (4)	VOC	0.01	0.02
FUCLUPS01	348 Unit Storage Fugitives (4)	VOC (10)	0.01	0.03
		VOC (11)	0.01	0.02
FUCLUPU01	348 Unit Fugitives (4)	VOC (10)	0.01	0.06
		VOC (11)	0.03	0.11

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
FUCO2SU01	321 Unit Fugitives (4)(8)	VOC	0.11	0.47
FUCOLATS01	Carbolate Storage Fugitives (4)	VOC (10)	0.03	0.12
		VOC (11)	0.01	0.01
FUCOOLT01	Cooling Tower	VOC	0.01	0.02
FUCRAS601	Crude Acid Storage 6 Fugitives (4)	VOC	0.01	0.05
FUCRAS801	Crude Acid Storage Area 8 Fugitives (4)	VOC	0.01	0.01
FUCRUDU01	333 Unit Fugitives (4)	VOC (10)	0.12	0.50
		VOC (11)	0.04	0.15
FUCSNPS01	Caustic and Nap Oil Storage Fugitives (4)(8)	VOC	0.04	0.15
FUCUIIP01	335 Unit Process Fugitives (4)	VOC (10)	0.08	0.36
		VOC (11)	0.04	0.18
FUCUIIS01	335 Unit Storage Fugitives (4)	VOC	0.03	0.11
FUCYCBS01	Cresylate/Carbolate Storage Fugitives (4)	VOC (10)	0.14	0.59
		VOC (11)	0.02	0.07
FUDRUM01	Drum Loading Fugitives (4)	VOC	0.01	0.01
FUDRYU01	MP85 Unit Fugitives (4)	VOC	0.01	0.02
FUEVAP01	314 Unit Fugitives (4)(8)	VOC	0.02	0.08
FUEVAFL01	314 Unit Flare Fugitives (4)(8)	VOC	0.20	0.88
FUEXTRU01	313 Unit Fugitives (4)(8)	VOC	0.32	1.38

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
FUFIREWA01	Firewater House A Fugitives (4)	VOC	0.01	0.01
FUFIREWB01	Firewater House B Fugitives (4)	VOC	0.01	0.01
FUGAST01	Gas Storage Fugitives (4)	VOC	0.06	0.27
FUIEXU01	332 Unit Fugitives (4)	VOC (10)	0.02	0.08
		VOC (11)	0.01	0.01
FULAB01	Lab Sump Fugitives (4)	VOC	0.01	0.01
FUMPTU01	351 Unit Fugitives (4)(8)	VOC	0.69	3.04
FUNBEX01	316 Unit Fugitives (4)(8)	VOC	0.13	0.57
FUOXRU01	349 Unit Fugitives (4)	VOC (10)	0.04	0.16
		VOC (11)	0.05	0.21
FUPAHRU01	PAHR Unit Fugitives (4)	VOC (10)	0.10	0.42
		VOC (11)	0.12	0.53
FUPWNOS01	Process Water and Nap Oil Storage Fugitives (4)	VOC (10)	0.16	0.70
		VOC (11)	0.02	0.07
FUPWS1801	Process Water Storage T-18 Fugitives (4)	VOC	0.02	0.09
FUPWS22201	Process Water Storage T-222 Fugitives (4)	VOC	0.01	0.01
FUPWS22301	Process Water Storage T-223 Fugitives (4)	VOC (10)	0.08	0.33
		VOC (11)	0.01	0.01
FURLU37A01	Rail Loading/Unloading Area 37A Fugitives (4)	VOC	0.01	0.05

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
FURLU37B01	Rail Loading/Unloading Area 37B Fugitives (4)	VOC (10)	0.02	0.09
		VOC (11)	0.01	0.01
FURLU37C01	Rail Loading/Unloading Area 37C Fugitives (4)	VOC	0.01	0.02
FURLU37D01	Rail Loading/Unloading Area 37D Fugitives (4)	VOC (10)	0.09	0.37
		VOC (11)	0.01	0.01
FURMDSOS01	Raw Material/Disulfide Storage Fugitives (4)	VOC	0.12	0.50
FURSDUS01	Residue Storage Fugitives (4)	VOC	0.01	0.02
FUSAPOU01	329 Unit Fugitives (4)(8)	VOC	0.01	0.01
FUSRU01	315 Unit Fugitives (4)(8)	VOC	0.27	1.20
FUSWETU01	301 Unit Fugitives (4)(8)	VOC	0.35	1.51
FUT22701	T-227 Area Fugitives (4)(8)	VOC	0.01	0.05
FUT27501	T-275 Area Fugitives (4)	VOC	0.01	0.01
FUTKFLR01	Tank Vent Flare Fugitives (4)	VOC (10)	0.35	1.53
		VOC (11)	0.37	1.60
FUTLU85B01	Tank Truck Loading/Unloading Area 85B (4)(8)	VOC	0.01	0.02
FUTTLU2401	Tank Truck Loading/Unloading Area 24 (4)	VOC (8)	0.03	0.12
		VOC (9)	0.01	0.02
FUVAFU01	334 Unit Fugitives (4)	VOC (10)	0.01	0.05

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
		VOC (11)	0.03	0.12
FUWASHU01	313 Unit Fugitives (4)(8)	VOC	0.12	0.52
FUWELFS01	361 Unit Feed Storage Fugitives (4)	VOC (10)	0.05	0.23
		VOC (11)	0.01	0.05
FUWELFS201	361 Unit Storage Fugitives (4)	VOC (10)	0.06	0.24
		VOC (11)	0.01	0.05
FUWELL01	361 Unit Fugitives (4)	VOC (10)	0.01	0.05
		VOC (11)	0.01	0.02
FUTLU85B02	351 Unit Loading Fugitives (4)(8)	VOC	0.14	0.01
FUTTLU2402	Tank Truck Loading Losses (7)(8)	VOC	41.18	3.52
FURLU37B02	Railcar Spots 12-20 Loading Losses (7)(8)	VOC	41.18	4.73
FURLU37D02	Railcar Spots 27-32 Loading Losses (7)(8)	VOC	41.18	3.36
HE1DU02	Heater H-2	VOC	0.04	0.16
		NO_x	0.64	2.81
		CO	0.14	0.59
		SO_2	0.03	0.12
		PM	0.08	0.33
HE2BOIL02	Boiler No. 2	VOC	0.43	1.88
		NO_x	4.82	21.13
		CO	5.86	25.66
		SO_2	0.33	1.46
		PM	0.59	2.60
HEC21DU02	Heater H-21	VOC	0.07	0.31

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
		NO_x	1.70	7.44
		CO	0.42	1.86
		SO_2	0.05	0.23
		PM	0.17	0.75
HEC25DU02	Heater H-25	VOC	0.07	0.29
		NO_x	1.56	6.83
		CO	0.39	1.71
		SO_2	0.05	0.21
		PM	0.16	0.68
HEC27DU02	Heater H-27	VOC	0.08	0.36
		NO_x	2.13	9.38
		CO	1.26	5.52
		SO_2	0.06	0.28
		PM	0.11	0.50
HEC33DU02	Heater H-8	VOC	0.07	0.31
		NO_x	1.70	7.44
		CO	0.42	1.86
		SO_2	0.05	0.23
		PM	0.17	0.75
HEC35DU02	Heater H-347001	VOC	0.15	0.64
		NO_x	1.56	6.83
		CO	1.54	6.73
		SO_2	0.11	0.47
		PM	0.35	1.55
HEC9DU02	Heater H-1	VOC	0.04	0.16
		NO_x	0.69	3.04
		CO	0.57	2.50
		SO_2	0.03	0.13
		PM	0.05	0.23
HECRUDU02	Heater H-7	VOC	0.10	0.42

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
		NO_x	2.31	10.11
		CO	0.58	2.53
		SO_2	0.07	0.31
		PM	0.23	1.01
HECRUDU03	Heater H-5	VOC	0.09	0.39
		NO_x	0.94	4.10
		CO	0.92	4.04
		SO_2	0.07	0.29
		PM	0.21	0.93
HECUIIP02	Heater H-33501	VOC	0.03	0.14
		NO_x	0.09	0.41
		CO	0.08	0.36
		SO_2	0.02	0.10
		PM	0.07	0.29
HECUIIP03	Heater H-33502	VOC	0.05	0.01
		NO_x	0.01	0.04
		CO	0.01	0.04
		SO_2	0.01	0.01
		PM	0.01	0.03
HEMPTU02	Heater H-800 (8)	VOC	0.04	0.15
		NO_x	0.61	2.67
		CO	0.13	0.56
		SO_2	0.03	0.12
		PM	0.07	0.32
HEOXRU13	Heater H-349001	VOC	0.33	1.45
		NO_x	3.53	15.45
		CO	3.48	15.24
		SO_2	0.24	1.07
		PM	0.80	3.50

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	Emission Rates * TPY**
IEPAHRU02	Ground Flare (8) (PAHR)	VOC	7.70	3.77
		NO_x	2.97	2.28
		CO	0.74	0.57
		SO_2	79.49	42.60
		PM	0.29	0.23
	Ground Flare (9) (PAHR)	VOC	5.07	2.76
		NO_x	0.87	0.61
		CO	0.52	0.36
		PM	0.05	0.03
SE4BOLS02	No. 4 Boiler Stack (8)	VOC	9.68	26.72
		NO_x	26.03	103.67
		CO	10.14	40.29
		SO_2	41.30	41.98
		PM	3.84	15.25
	No. 4 Boiler Stack (9)	VOC	5.79	16.68
		NO_x	9.62	38.05
		CO	9.92	39.26
		SO_2	1.55	6.21
		PM	1.95	7.78
SE4BOLS03	SO_2 Absorber Stack (8)	VOC	8.09	20.55
		NO_x	4.96	20.15
		CO	3.00	12.74
		SO_2	1.61	4.34
		PM	1.20	5.10
	SO_2 Absorber Stack (9)	VOC	5.46	15.48
		NO_x	2.86	11.77
		CO	2.78	11.71
		SO_2	0.02	0.08
		PM	0.96	4.16

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
SEBAYOU02	Scrubber S-1002 (8)	VOC	0.27	0.01
SEBAYOU03	Scrubber S-1000	VOC (8)	0.65	0.04
		VOC (9)	0.28	0.02
SEC09DU08	Scrubber S-24	VOC (8)	1.21	0.35
		VOC (9)	1.40	0.36
SEC21DU07	Scrubber S-141	VOC (8)	0.33	0.09
		VOC (9)	0.44	0.09
SEC25DU03	Scrubber S-25	VOC (8)	0.29	0.11
		VOC (9)	0.78	0.10
SECAS1607	Scrubber S-86	VOC (8)	0.36	0.02
		VOC (9)	0.42	0.02
SECAS33B10	Scrubber S-78	VOC (8)	2.46	0.45
		VOC (9)	2.47	0.45
SECAS33D08	Scrubber S-82	VOC (10)	0.33	0.03
		VOC (11)	0.22	0.02
SECAS33E07	Scrubber S-5	VOC (8)	0.18	0.01
		VOC (9)	0.17	0.01
SECAS9702	Scrubber S-260	VOC (10)	1.10	0.06
		VOC (11)	1.19	0.06
SECLUPS02	Scrubber S-18	VOC (10)	2.19	0.30
		VOC (11)	1.95	0.31
SECO2SU04	Scrubber S-502 (8)	VOC	0.34	0.95
SECO2SU05	Scrubber S-501 (8)	VOC	0.40	0.99

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
SECOLATS03	Scrubber S-171 (10)	VOC	0.68	0.10
SECOLATS05	Scrubber S-174 (10)	VOC	1.26	0.21
SECRAS602	Scrubber S-83 (8)	VOC	0.07	0.07
SEIEXU02	Scrubber S-917	VOC (10)	0.11	0.04
		VOC (11)	0.19	0.01
SEIEXU03	Scrubber S-332-001	VOC	0.11	0.02
SEOXRU03	Scrubber S-310	VOC (8)	0.44	0.16
		VOC (9)	0.58	0.12
SESAPOU02	Scrubber S-927 (8)	VOC	0.05	0.01
SET27504	Scrubber S-275	VOC	0.05	0.01
SEWELFS03	Scrubber S-234 (10)	VOC	0.07	0.04
VEBARGE02	Tank T-1009	VOC	7.48	0.10
VEBARGE03	Tank T-1014	VOC	0.05	0.01
SEMPTU03	Scrubber S-807 (5)(8)	VOC	13.96	1.68
SEMPTU03	Scrubber S-807 (6)(8)	VOC	0.06	—
VECOOLT02	Tank T-950	VOC	0.01	0.01
VEFIREWA03	Tank T-1012	VOC	0.01	0.01
VEFIREWB03	Tank T-1013	VOC	0.06	0.01
VEGAST02	Tank T-1010	VOC	0.14	0.01

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	Emission Rates * TPY**
VEGAST03	Tank T-1011	VOC	24.01	0.25
VEIEXU04	Tank T-910 (8)	VOC	0.01	0.01
VEMPTU05	Tank T-810 (8)	VOC	0.01	0.01
VEMPTU06	Tank T-811 (8)	VOC	0.01	0.01
VERMDSOS02	Tank T-163 (8)	VOC	5.91	1.51
VERMDSOS03	Tank T-164 (8)	VOC	5.91	1.51
VEWELL02	F-603/F-604 Vent	VOC	11.87	1.74
VEIEXU03	Tank T-908 (8)	VOC	0.01	0.01
VEIEXU08	Tank T-906 (8)	VOC	0.01	0.01
VEIEXU09	Tank T-907 (8)	VOC	0.01	0.01
VEIEXU10	Tank T-909 (8)	VOC	0.01	0.01
VECAS33E05	Tank T-54 (8)	KOH	0.01	0.01
VECSNPS02	Tank T-211017 (8)	NaOH	0.01	0.01
VECSNPS03	Tank T-211028 (8)	NaOH	0.01	0.01
VECSNPS04	Tank T-211029 (8)	NaOH	0.01	0.01
VEMPTU07	Tank T-825 (8)	H_2SO_4	0.01	0.01
VESAS02	Tank T-93 (8)	H_2SO_4	0.01	0.01
VEMPTU04	Tank T-806 (8)	KOH	0.01	0.01

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
CO - carbon monoxide
SO_2 - sulfur dioxide
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.
HCl - hydrogen chloride
NaOH - sodium hydroxide
KOH - potassium hydroxide
H_2SO_4 - sulfuric acid
(4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
(5) Allowable emissions from EPN SEMPTU03 when the MPT vent chiller and Scrubber S-807 are operational.
(6) Allowable emissions from EPN SEMPTU03 when the MPT vent chiller and Scrubber S-807 are shut down.
(7) Emission rates for EPNs FURLU37B02, FURLU37D02, and FUTTLU2402 are based on the assumption that the plantwide throughput of 2,500,000 gallons per year of Naphthalene Oil is loaded at each EPN. However, the annual throughput of Naphthalene Oil from all three loading EPNs shall not exceed 2,500,000 gallons per year.
(8) Allowable emissions only while using cresylate solution as the primary raw material. Except during periods of transition, as described by Special Condition Nos. 3 and 4, all limits denoted with this footnote shall apply at the same time.
(9) Allowable emissions while using Value Cresylic Acid as the primary raw material. Except during periods of transition, as described by Special Condition Nos. 3 and 4, all limits denoted with this footnote shall apply at the same time.
(10) Authorized emissions before the use Value Cresylic Acid as a raw material. These limits will no longer be
valid once the material is introduced into the production process.
(11) Authorized emissions after Value Cresylic Acid is introduced as a raw material.

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Emissions from individual hazardous air pollutants (HAPs) under this permit shall not exceed 6.11 tons per year (tpy) and total HAPs shall not exceed 20.00 tpy. All individual speciated emissions shall conform to representations listed in the "Site HAP Emissions Summary" in the March 15, 2002, permit renewal application.

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

_____Hrs/day ____Days/week ____Weeks/year or __8,760__Hrs/year

** Compliance with annual emission limits is based on a rolling 12-month period.

Dated ___June 10, 2005____