

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 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
SECOLATS05	Tank 174	CA	0.003	0.008
HECUIIP02	Process Heater	CO	0.12	0.38
		NO _x	0.31	0.95
		PM ₁₀	0.03	0.09
		SO _x	<0.01	0.02
		VOC	0.04	0.11
HECUIIP03	Process Heater	CO	0.02	0.04
		NO _x	0.07	0.21
		PM ₁₀	<0.01	0.01
		SO _x	<0.01	<0.01
		VOC	<0.01	0.01
FUCUIITU01	Truck Unloading	CA	<0.01	<0.01
FECUIIP04	Flare	CO	0.32	1.00
		H ₂ S	<0.01	<0.01
		NO _x	1.28	4.00
		PM ₁₀	0.05	0.14
		SO _x	0.40	0.86
		VOC	0.11	0.35
		Cresols	0.05	0.15
		CA	0.02	0.05
FECUIIP04	Flare Not Operating CU-II Not Operating Scrubber SECUIIP05 Operating	CA	0.03	0.02
FUCUIIP01	Process Fugitives (4)	CA	0.04	0.16
FUCUIIS01	Process Fugitives (4)	CA	0.04	0.11

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
FU1DU01	Process Fugitives (4) No. 1 Distillation Unit	Cresols	0.35	1.39
FU2BOIL01	Process Fugitives (4) No. 2 Boiler Area	Cresols	<0.01	<0.01
		CA	<0.01	<0.01
FU4BOLS01	Process Fugitives (4) (5) No. 4 Boiler System	Cresols	<0.01	0.02
		CA	<0.01	0.01
		VOC	0.05	<0.01
		Cresols	<0.01	0.01
		CA	<0.01	0.01
		VOC	<0.01	<0.01
FUBAYOU01	Process Fugitives (4) (5) Bayou Tank Farm	Cresols	0.08	0.31
		CA	0.09	0.37
		VOC	0.19	0.10
		Cresols	0.04	0.17
		CA	0.05	0.20
		VOC	0.08	0.02
FUC09DU01	Process Fugitives (4) C-9 Distillation Unit	Cresols	0.03	0.09
		CA	0.38	1.38
FUC21DU01	Process Fugitives (4) C-21 Distillation Unit	Cresols	0.22	0.82
		CA	0.16	0.60
FUC25DU01	Process Fugitives (4) C-25 Distillation Unit	Cresols	0.22	0.93
		CA	0.11	0.44
FUC27DU01	Process Fugitives (4) C-27 Distillation Unit	VOC	0.36	1.57
FUC33DU01	Process Fugitives (4) C-33 Distillation Unit	Cresols	0.04	0.16
		CA	0.31	1.19
FUCAS1201	Process Fugitives (4) CA Storage Area 12	VOC	0.05	0.22

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
FUCAS1601	Process Fugitives (4) CA Storage Area 16	Cresols	0.03	0.13
		CA	0.05	0.22
FUCAS1701	Process Fugitives (4) CA Storage Area 17	Cresols	0.05	0.21
		CA	0.02	0.09
FUCAS19B01	Process Fugitives (4) CA Storage Area 19B	Cresols	0.06	0.24
		CA	0.22	0.96
FUCAS33B01	Process Fugitives (4) CA Storage Area 33B	Cresols	0.16	0.70
		CA	0.10	0.41
FUCAS33D01	Process Fugitives (4) CA Storage Area 33D	Cresols	0.03	0.11
		CA	0.12	0.53
FUCAS33E01	Process Fugitives (4) CA Storage Area 33E	Cresols	0.05	0.21
		CA	0.03	0.13
FUCAS9701	Process Fugitives (4) CA Storage Area 97	Cresols	0.06	0.24
		CA	<0.01	<0.01
FUCLUPS01	Process Fugitives (4) Cleanup Unit Storage	Cresols	0.04	0.10
		CA	0.03	0.06
FUCLUPU01	Process Fugitives (4) Cleanup Unit	Cresols	0.10	0.21
		CA	0.07	0.14
FUC02SU01	Process Fugitives (4) CO ₂ Springing Unit	Cresols	0.16	0.67
		CA	0.15	0.64
FUCOLATS01	Process Fugitives (4) (5) Carbolate Storage	Cresols	<0.01	<0.01
		CA	<0.01	<0.01
		VOC	0.11	0.31
		Cresols	<0.01	<0.01
		CA	<0.01	<0.01
		VOC	<0.01	<0.01
FUCRAS601	Process Fugitives (4) Crude Acid Storage	VOC	0.14	0.63

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
	Area 6			
FUCRAS801	Process Fugitives (4) Crude Acid Storage Area 8	VOC	0.05	0.21
FUCRAS19A01	Process Fugitives (4) Crude Acid Storage Area 3	Cresols	0.02	0.10
		CA	0.02	0.09
FUCRUDU01	Process Fugitives (4) Crude Unit	VOC	0.53	2.33
FUCSNPS01	Process Fugitives (4) (5) Caustic/Nap Oil Storage	Cresols	0.02	<0.01
		CA	0.01	<0.01
		VOC	0.58	0.04
		Cresols	<0.01	<0.01
		CA	<0.01	<0.01
		VOC	0.04	<0.01
FUDRUM01	Process Fugitives (4) Drumming Building	Cresols	0.02	0.01
		CA	0.02	0.01
FUEVAP01	Process Fugitives (4) Evaporators	Cresols	<0.01	0.04
		CA	<0.01	<0.01
		VOC	0.16	0.46
FUEVFL01	Process Fugitives (4) Evaporator Flare	Cresols	<0.01	<0.01
		CA	<0.01	<0.01
		VOC	0.03	0.08
FUIEXU01	Process Fugitives (4) Ion Exchange Units	VOC	0.33	1.46
FULAB01	Process Fugitives (4) Lab Sump	Cresols	<0.01	0.03
		CA	<0.01	0.03
FUMPTU01	Process Fugitives (4) MPT Unit	Cresols	0.08	0.30
		CA	<0.01	<0.01

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
FUNBEX01	Process Fugitives (4) (5) N-Base Extraction	Cresols	0.04	0.11
		CA	0.03	0.07
		VOC	1.19	3.42
		Cresols	<0.01	0.01
		CA	<0.01	<0.01
		VOC	0.15	0.43
FUOXRU01	Process Fugitives (4) OXR Unit	Cresols	0.26	1.07
		CA	0.02	0.09
FUPWNOS01	Process Fugitives (4) (5) Process Water/Nap Oil Storage	Cresols	0.02	0.10
		CA	0.02	0.09
		VOC	0.69	3.01
		Cresols	<0.01	<0.01
		CA	<0.01	<0.01
		VOC	0.06	0.26
FUPWS22201	Process Fugitives (4) Process Water Storage Tank T-222	Cresols	<0.01	0.03
		CA	<0.01	0.03
FUPWS22301	Process Fugitives (4) (5) Process Water Storage Tank T-223	Cresols	0.03	0.12
		CA	0.03	0.11
		Cresols	<0.01	0.02
		CA	<0.01	0.02
FURLU37A01	Process Fugitives (4) Rail Loading/Unloading Area 37A	Cresols	0.09	0.09
		CA	0.09	0.09
FURLU37B01	Process Fugitives (4) Rail Loading/Unloading Area 37B	Cresols	<0.01	<0.01
		CA	<0.01	<0.01
FURLU37C01	Process Fugitives (4)	Cresols	0.05	<0.01

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
	Rail Loading/Unloading Area 37C			
FURLU37D01	Process Fugitives (4)	Cresols	0.01	<0.01
	Rail Loading/Unloading Area 37D	CA	0.01	<0.01
		VOC	0.02	0.08
FURSDUS01	Process Fugitives (4)	Cresols	0.03	0.13
	Residue Storage	CA	0.03	0.13
FUSAPOU01	Process Fugitives (4)	VOC	0.05	0.21
	Sulfuric Acid Polishing Unit			
FUSAS01	Process Fugitives (4)	Cresols	<0.01	<0.01
	Sulfuric Acid Storage	CA	<0.01	<0.01
FUT27501	Process Fugitives (4)	Cresols	0.01	0.05
	Tank T-275 Area	CA	0.03	0.14
FUTKFLR01	Process Fugitives (4) (5)	Cresols	<0.01	<0.01
	Tank Vent Flare	CA	<0.01	<0.01
		VOC	0.97	4.25
		Cresols	<0.01	<0.01
		CA	<0.01	<0.01
		VOC	0.04	0.16
FUTTLU2401	Process Fugitives (4)	Cresols	0.04	0.03
	Tank-Truck Loading and Unloading	CA	0.03	0.03
FUVAFU01	Process Fugitives (4)	VOC	0.16	0.69
	Vacuum Flash Unit			
FUWELFS01	Process Fugitives (4) (5)	Cresols	<0.01	<0.01
	Disposal Well Feed Storage	CA	<0.01	<0.01
		VOC	0.20	0.02
		Cresols	<0.01	<0.01
		CA	<0.01	<0.01
		VOC	0.01	<0.01

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
FUWELL01	Process Fugitives (4) (5) Disposal Well	Cresols	<0.01	<0.01
		CA	<0.01	<0.01
		VOC	0.15	0.02
		Cresols	<0.01	<0.01
		CA	<0.01	<0.01
		VOC	0.01	<0.01
VECAS2501	C-25 Vent	VOC	<0.01	<0.01
VECAS2502	Tank T-235 (9)	VOC	<0.01	<0.01
VECAS2503	Tank T-237 (9)	VOC	<0.01	<0.01
VECAS2504	Tank T-238 (9)	VOC	<0.01	<0.01
VECAS2505	Tank T-239 (9)	VOC	<0.01	<0.01
VEC27DU04	Tank T-351 (9)	VOC	<0.01	0.02
VEC27DU05	Tank T-352 (9)	VOC	0.42	0.03
VEC27DU06	Tank T-353 (9)	VOC	<0.01	<0.01
VEC27DU07	Tank T-354 (9)	VOC	<0.01	<0.01
VECAS2701	C-27 Vent (9)	VOC	<0.01	<0.01
SEC25DU03	S-25 Scrubber	Cresols	0.02	<0.01
		CA	0.01	0.01
FURLU37A01	Rail Loading A2 Area (6) Spots 5, 7, 8, and 9	VOC	2.14	0.20
VECAS33D02	Tank T-70 (6)	VOC	0.26	<0.01

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
VECAS33D03	Tank T-71 (6)	VOC	<0.01	0.02
VECAS33D05	Tank T-82B (6)	VOC	<0.01	<0.01
VECAS33D06	Tank T-89 (6)	VOC	<0.01	<0.01
SECAS33DO8	S-82 Scrubber	Cresols	0.02	<0.01
		CA	0.02	<0.01
VECAS1702	Tank T-37 (11)	VOC	0.13	<0.01
VECAS1703	Tank T-38 (11)	VOC	<0.01	<0.01
VECAS1704	Tank T-57 (11)	VOC	<0.01	<0.01
VECAS1705	Tank T-58 (11)	VOC	<0.01	<0.01
VECAS19810	Tank T-68 (11)	VOC	0.32	0.01
VECAS19811	Tank T-69 (11)	VOC	<0.01	0.01
VECAS1706	Tank T-86 (11)	VOC	<0.01	<0.01
VECAS1603	Tank T-151 (11)	VOC	<0.06	0.06
VECAS1604	Tank T-152 (11)	VOC	<0.12	0.03
SECAS1707	S-86 Scrubber	Cresols	0.02	<0.01
		CA	0.01	<0.01
FUDRUM01	Drum Loading (7)	VOC	0.52	0.02
FURLU37A01	Rail Loading A1 Area (7) Spots 2 and 3	VOC	2.14	0.13
VECAS33E02	Tank T-5 (7)	VOC	0.13	0.01
VECAS33E03	Tank T-6 (7)	VOC	<0.01	0.01

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
VECAS33E06	Tank T-96 (7)	VOC	<0.01	0.01
SECAS33E07	S-96 Scrubber	Cresols	0.03	<0.01
		CA	0.03	<0.01
SERSDUS03	S-190 Scrubber	CA	<0.01	0.01
		VOC	<0.01	<0.01
FUTTLU2401	Tank Truck Loading (8)	VOC	1.19	0.18
FURLU37C01	Railcar Loading Vent 37C	VOC (8)	0.74	0.02
FURLU37D01	Railcar Loading Vent 37D	VOC (8)	1.30	0.05
SECAS9701	Tank T-260 (8)	VOC	0.23	0.05
SECAS9702	Tank T-261 (8)	VOC	<0.01	0.01
SECAS9702	S-260 Scrubber	Cresols	0.07	0.01
		CA	0.03	<0.01
VET27503	Tank T-17 (10)	VOC	<0.01	<0.01
VECRS19A02	Tank T-80 (10)	VOC	0.24	0.02
VECRS19A03	Tank T-81 (10)	VOC	<0.01	0.02
VET27502	Tank T-275 (10)	VOC	<0.01	0.03
SET27504	S-275 Scrubber	Cresols	<0.01	<0.01
		CA	<0.01	<0.01
VEOXRU04	Tank T-201 (12)	VOC	<0.01	<0.01
VEOXRU05	Tank T-280 (12)	VOC	<0.01	<0.01
VEOXRU06	Tank T-283 (12)	VOC	0.32	0.02
VEOXRU07	Tank T-284 (12)	VOC	<0.01	0.03

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
VEOXRU08	Tank T-285 (12)	VOC	<0.01	0.03
VEOXRU09	Tank T-286 (12)	VOC	<0.01	<0.01
VEOXRU10	Tank T-287 (12)	VOC	<0.01	<0.01
VEOXRU11	Tank T-288 (12)	VOC	<0.01	<0.01
SEOXRU03	S-310 Scrubber	Cresols	0.03	<0.01
		CA	<0.01	<0.01
SEBAYOU03	Tanks T-1000,1001 and 1003 (13)	CA	0.002	0.01
	Tank T-1000 (14)	VOC	0.7	3.04
	Tank T-1003 (15)	VOC	0.26	1.12
SEBAYOU02	Tank T-1002 (16)	CA	0.002	0.009
FUBAYOU01	Fugitives (17)	VOC	0.07	0.01

- (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) CO - carbon monoxide
CA - cresylic acid
H₂S - hydrogen sulfide
NO_x - total oxides of nitrogen
PM₁₀ - particulate matter less than 10 microns
SO_x - sulfur oxides
VOC - volatile organic compounds as defined in General Rule 101.1
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) These are uncontrolled process fugitive emissions prior to compliance with Special Provision No. 15.
- (6) This source will be sent to Scrubber S-82 under Special Provision No. 17.
- (7) This source will be sent to Scrubber S-96 under Special Provision No. 19.
- (8) This source will be sent to Scrubber S-260 under Special Provision No. 21.
- (9) This source will be sent to Scrubber S-25 under Special Provision No. 16.
- (10) This source will be sent to Scrubber S-275 under Special Provision No. 22.
- (11) This source will be sent to Scrubber S-86 under Special Provision No. 18.
- (12) This source will be sent to Scrubber S-310 under Special Provision No. 23.
- (13) These sources will be sent to Scrubber S-1000 under Special Provision No. 26.

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates *</u>	
			lb/hr	TPY

(14) Emissions from this source when in sodium cresylate service.

(15) Emissions from this source when in naphtha service.

(16) This source will be sent to Scrubber S-1002 under Special Provision No. 27.

(17) 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_____