

# 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 <sub>x</sub>	0.31	0.95
		PM <sub>10</sub>	0.03	0.09
		SO <sub>x</sub>	<0.01	0.02
		VOC	0.04	0.11
HECUIIP03	Process Heater	CO	0.02	0.04
		NO <sub>x</sub>	0.07	0.21
		PM <sub>10</sub>	<0.01	0.01
		SO <sub>x</sub>	<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 <sub>2</sub> S	<0.01	<0.01
		NO <sub>x</sub>	1.28	4.00
		PM <sub>10</sub>	0.05	0.14
		SO <sub>x</sub>	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

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

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

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
FUCRAS601	Process Fugitives Crude Acid Storage Area 6 (4)	VOC	0.14	0.63
FUCRAS801	Process Fugitives Crude Acid Storage Area 8 (4)	VOC	0.05	0.21
FUCRAS19A01	Process Fugitives Crude Acid Storage Area 3 (4)	Cresols	0.02	0.10
		CA	0.02	0.09
FUCRUDU01	Process Fugitives Crude Unit (4)	VOC	0.53	2.33
FUCSNPS01	Process Fugitives Caustic and Nap Oil Storage (4) (5)	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 Drumming Building (4)	Cresols	0.02	0.01
		CA	0.02	0.01
FUEVAP01	Process Fugitives Evaporators (4)	Cresols	<0.01	0.04
		CA	<0.01	<0.01
		VOC	0.16	0.46
FUEVFL01	Process Fugitives Evaporator Flare (4)	Cresols	<0.01	<0.01
		CA	<0.01	<0.01
		VOC	0.03	0.08
FUIEXU01	Process Fugitives Ion Exchange Units (4)	VOC	0.33	1.46
FULAB01	Process Fugitives Lab Sump (4)	Cresols	<0.01	0.03
		CA	<0.01	0.03

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
FUMPTU01	Process Fugitives MPT Unit (4)	Cresols	0.08	0.30
		CA	<0.01	<0.01
FUNBEX01	Process Fugitives N-Base Extraction (4) (5)	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 OXR Unit (4)	Cresols	0.26	1.07
		CA	0.02	0.09
FUPWNOS01	Process Fugitives Process Water and Nap Oil Storage (4) (5)	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 Process Water Storage Tank T-222 (4)	Cresols	<0.01	0.03
		CA	<0.01	0.03
FUPWS22301	Process Fugitives Process Water Storage Tank T-223 (4) (5)	Cresols	0.03	0.12
		CA	0.03	0.11
		Cresols	<0.01	0.02
		CA	<0.01	0.02
FURLU37A01	Process Fugitives Rail Loading and Unloading Area 37A (4)	Cresols	0.09	0.09
		CA	0.09	0.09
FURLU37B01	Process Fugitives Rail Loading and Unloading Area 37B (4)	Cresols	<0.01	<0.01
		CA	<0.01	<0.01

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
FURLU37C01	Process Fugitives Rail Loading and Unloading Area 37C (4)	Cresols	0.05	<0.01
FURLU37D01	Process Fugitives Rail Loading and Unloading Area 37D (4)	Cresols	0.01	<0.01
		CA	0.01	<0.01
		VOC	0.02	0.08
FURSDUS01	Process Fugitives Residue Storage (4)	Cresols	0.03	0.13
		CA	0.03	0.13
FUSAPOU01	Process Fugitives Sulfuric Acid Polishing Unit (4)	VOC	0.05	0.21
FUSAS01	Process Fugitives Sulfuric Acid Storage (4)	Cresols	<0.01	<0.01
		CA	<0.01	<0.01
FUT27501	Process Fugitives Tank T-275 Area (4)	Cresols	0.01	0.05
		CA	0.03	0.14
FUTKFLR01	Process Fugitives Tank Vent Flare (4) (5)	Cresols	<0.01	<0.01
		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 Tank-Truck Loading and Unloading (4)	Cresols	0.04	0.03
		CA	0.03	0.03
FUVAFU01	Process Fugitives Vacuum Flash Unit (4)	VOC	0.16	0.69
FUWELFS01	Process Fugitives Disposal Well Feed Storage (4) (5)	Cresols	<0.01	<0.01
		CA	<0.01	<0.01
		VOC	0.20	0.02
		Cresols	<0.01	<0.01

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
		CA	<0.01	<0.01
		VOC	0.01	<0.01
FUWELL01	Process Fugitives	Cresols	<0.01	<0.01
	Disposal Well (4) (5)	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

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
VECAS33D02	Tank T-70 (6)	VOC	0.26	<0.01
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



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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
VECAS33E02	Tank T-5 (7)	VOC	0.13	0.01
VECAS33E03	Tank T-6 (7)	VOC	<0.01	0.01
VECAS33E06	Tank T-96 (7)	VOC	<0.01	0.01
SECAS33E07	S-5 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

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

- (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  
H<sub>2</sub>S - hydrogen sulfide  
NO<sub>x</sub> - total oxides of nitrogen  
PM<sub>10</sub> - particulate matter less than 10 microns  
SO<sub>x</sub> - 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 Condition No. 15.
- (6) This source will be sent to Scrubber S-82 under Special Condition No. 17.
- (7) This source will be sent to Scrubber S-96 under Special Condition No. 19.

- (8) This source will be sent to Scrubber S-260 under Special Condition No. 21.
- (9) This source will be sent to Scrubber S-25 under Special Condition No. 16.
- (10) This source will be sent to Scrubber S-275 under Special Condition No. 22.
- (11) This source will be sent to Scrubber S-86 under Special Condition No. 18.
- (12) This source will be sent to Scrubber S-310 under Special Condition No. 23.
- (13) These sources will be sent to Scrubber S-1000 under Special Condition No. 26.
- (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 Condition No. 27.

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- \* 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 \_\_\_\_\_