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.

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Ra lb/hr TPY			
SECOLATS05	Та	ank 174		CA	0.003	0.008
HECUIIP02	Pr	rocess Heater		CO NOx PM10 SOx VOC	0.12 0.31 0.03 <0.01 0.04	0.38 0.95 0.09 0.02 0.11
HECUIIP03	Pr	rocess Heater		CO NOx PM10 SOx VOC	0.02 0.07 <0.01 <0.01 <0.01	0.04 0.21 0.01 <0.01 0.01
FUCUIITU01	Tr	ruck Unloading		CA	<0.01	<0.01
FECUIIP04	FI	are		CO H2S NOx PM10 SOx VOC Cresols CA	0.32 <0.01 1.28 0.05 0.40 0.11 0.05 0.02	1.00 <0.01 4.00 0.14 0.86 0.35 0.15 0.05
FUCUIIP01	Pr	rocess Fugitives (4)		CA	0.04	0.16
FUCUIIS01	Pr	rocess Fugitives (4)		CA	0.04	0.11
FU1DU01		rocess Fugitives (4) No. 1 Distillation Unit	t.	Cresols	0.35	1.39
FU2BOIL01	Pr	rocess Fugitives (4)		Cresols	<0.01	<0.01

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Page 2	No. 2 Boiler Area	CA	<0.01	<0.01
FU4BOLS01	Process Fugitives (4) (5) No. 4 Boiler System	Cresols CA VOC	<0.01 <0.01 0.05	0.02 0.01 <0.01
		Cresols	<0.01	0.01
		CA VOC	<0.01 <0.01	0.01 <0.01

Emission Point No. (1)	Source Air Contaminant <u>Emissi</u> Name (2) Name (3) lb/hr	ion Rates* TPY		
FUBAYOU01	Process Fugitives (4) (5) Bayou Tank Farm	Cresols CA VOC Cresols CA VOC	0.08 0.09 0.19 0.04 0.05 0.01	0.31 0.37 0.10 0.17 0.20 <0.01
FUC09DU01	Process Fugitives (4)	Cresols	0.03	0.09
	C-9 Distillation Unit	CA	0.38	1.38
FUC21DU01	Process Fugitives (4)	Cresols	0.22	0.82
	C-21 Distillation Unit	CA	0.16	0.60
FUC25DU01	Process Fugitives (4)	Cresols	0.22	0.93
	C-25 Distillation Unit	CA	0.11	0.44
FUC27DU01	Process Fugitives (4)	VOC	0.36	1.57
	C-27 Distillation Unit			
FUC33DU01	Process Fugitives (4)	Cresols	0.04	0.16
	C-33 Distillation Unit	CA	0.31	1.19
FUCAS1201	Process Fugitives (4)	VOC	0.05	0.22
	CA Storage Area 12			
FUCAS1601	Process Fugitives (4)	Cresols	0.03	0.13
	CA Storage Area 16	CA	0.05	0.22
FUCAS1701	Process Fugitives (4)	Cresols	0.05	0.21
	CA Storage Area 17	CA	0.02	0.09

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FUCAS19B01	Process Fugitives (4)	Cresols	0.06	0.24
	CA Storage Area 19B	CA	0.22	0.96
FUCAS33B01	Process Fugitives (4)	Cresols	0.16	0.70
	CA Storage Area 33B	CA	0.10	0.41
FUCAS33D01	Process Fugitives (4)	Cresols	0.03	0.11
	CA Storage Area 33D	CA	0.12	0.53
FUCAS33E01	Process Fugitives (4)	Cresols	0.05	0.21
	CA Storage Area 33E	CA	0.03	0.13
FUCAS9701	Process Fugitives (4)	Cresols	0.06	0.24
	CA Storage Area 97	CA	<0.01	<0.01
FUCLUPS01	Process Fugitives (4)	Cresols	0.04	0.10
	Cleanup Unit Storage	CA	0.03	0.06

Emission Point No. (1)	Source Name (2)	Air Contaminant <u>Emis</u> Name (3) lb/hr	sion Rates* TPY		
FUCLUPU01		Process Fugitives (4)	Cresols	0.10	0.21
		Cleanup Unit	CA	0.07	0.14
FUC02SU01		Process Fugitives (4)	Cresols	0.16	0.67
		CO2 Springing Unit	CA	0.15	0.64
FUCOLATS01		Process Fugitives (4) (5)	Cresols	<0.01	<0.01
		Carbolate Storage	CA VOC	<0.01 0.11	<0.01 0.31
			Cresols	<0.01	<0.01
			CA VOC	<0.01 <0.01	<0.01 <0.01
FUCRAS601		Process Fugitives (4)	VOC	0.14	0.63
		Crude Acid Storage Area 6			
FUCRAS801		Process Fugitives (4)	VOC	0.05	0.21
		Crude Acid Storage Area 8			
FUCRAS19A0	1	Process Fugitives (4)	Cresols	0.02	0.10
		Crude Acid Storage	CA	0.02	0.09
		Area 3			
FUCRUDU01		Process Fugitives (4)	VOC	0.53	2.33
		Crude Unit			
FUCSNPS01		Process Fugitives (4) (5)	Cresols	0.02	<0.01

	Caustic/Nap Oil Storage	CA VOC	0.01 0.58	<0.01 0.04
		Cresols	<0.01	<0.01
		CA VOC	<0.01 0.04	<0.01 <0.01
FUDRUM01	Process Fugitives (4)	Cresols	0.02	0.01
	Drumming Building	CA	0.02	0.01
FUEVAP01	Process Fugitives (4)	Cresols	<0.01	0.04
	Evaporators	CA VOC	<0.01 0.16	<0.01 0.46
FUEVFL01	Process Fugitives (4)	Cresols	<0.01	<0.01
	Evaporator Flare	CA	<0.01	<0.01
		VOC	0.03	0.08

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3) I	Emission R b/hr TP)			
FUIEXU01		Process Fugitives (4)		VOC	0.33	1.46
		Ion Exchange Units				
FULAB01		Process Fugitives (4)		Cresols	<0.01	0.03
		Lab Sump		CA	<0.01	0.03
FUMPTU01		Process Fugitives (4)		Cresols	0.08	0.30
		MPT Unit		CA	<0.01	<0.01
FUNBEX01		Process Fugitives (4) (N-Base Extraction	5)	Cresols CA VOC	0.04 0.03 1.19	0.11 0.07 3.42
				Cresols	<0.01	0.01
				CA VOC	<0.01 0.15	<0.01 0.43
FUOXRU01		Process Fugitives (4)		Cresols	0.26	1.07
		OXR Unit		CA	0.02	0.09
FUPWNOS01		Process Fugitives (4) ((5)	Cresols	0.02	0.10
		Process Water/Nap C Storage	Dil	CA VOC	0.02 0.69	0.09 3.01
				Cresols	<0.01	<0.01
				CA VOC	<0.01 0.06	<0.01 0.26
FUPWS22201		Process Fugitives (4) Process Water Storag	ge	Cresols CA	<0.01 <0.01	0.03 0.03

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Tank T-222

FUPWS22301	Process Fugitives (4) (5) Process Water Storage Tank T-223	Cresols CA	0.03 0.03	0.12 0.11
		Cresols	< 0.01	0.02
		CA	<0.01	0.02
FURLU37A01	Process Fugitives (4)	Cresols	0.09	0.09
	Rail Loading/Unloading Area 37A	CA	0.09	0.09
FURLU37B01	Process Fugitives (4)	Cresols	< 0.01	< 0.01
	Rail Loading/Unloading Area 37B	CA	<0.01	<0.01
FURLU37C01	Process Fugitives (4) Rail Loading/Unloading Area 37C	Cresols	0.05	<0.01

Emission Point No. (1)	Source Air Contaminant Emiss Name (2) Name (3) lb/hr	sion Rates* TPY		
FURLU37D01	Process Fugitives (4)	Cresols	0.01	<0.01
	Rail Loading/Unloading	CA	0.01	<0.01
	Area 37D	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 Cresols	0.97 <0.01	4.25 <0.01
		CA	<0.01	<0.01
		VOC	0.04	0.16
FUTTLU2401	Process Fugitives (4)	Cresols	0.04	0.03
	Tank-Truck Loading	CA	0.03	0.03
	and Unloading			

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FUVAFU01	Process Fugitives (4) Vacuum Flash Unit	VOC	0.16	0.69
FUWELFS01	Process Fugitives (4) (5)	Cresols	<0.01	<0.01
	Disposal Well Feed	CA	<0.01	<0.01
	Storage	VOC	0.20	0.02
		Cresols	<0.01	<0.01
		CA	<0.01	<0.01
		VOC	0.01	<0.01
FUWELL01	Process Fugitives (4) (5) Disposal Well	Cresols CA	<0.01 <0.01	<0.01 <0.01
		VOC	0.15	0.02
		Cresols	<0.01	<0.01
		CA	<0.01	<0.01
		VOC	0.01	<0.01
VECAS1203	Tank T-142 (9)	VOC	0.57	0.31

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Ra				
VEC21DU03	Tanl	k T-143 (9)		VOC		<0.01	0.05
VEC21DU05	Tanl	k T-146 (9)		VOC		0.02	0.03
VEC21DU06	Tanl	k T-147 (9)		VOC		<0.01	0.03
VEC27DU04	Tanl	k T-351 (9)		VOC		<0.01	0.02
VEC27DU05	Tanl	k T-352 (9)		VOC		0.42	0.03
SEC25DU03	S-25	5 Scrubber		Cresols CA	5	0.02 0.01	<0.01 0.01
FURLU37A01		Loading A2 Area ots 5, 7, 8 and 9	(6)	VOC		2.14	0.20
VECAS33D02	Tanl	k T-70 (6)		VOC		0.26	<0.01
VECAS33D03	Tanl	k T-71 (6)		VOC		<0.01	0.02
VECAS33D05	Tanl	k T-82B (6)		VOC	<0.01	<0.01	
VECAS33D06	Tanl	k T-89 (6)		VOC	<0.01	<0.01	
SECAS33DO8	S-82	2 Scrubber		Cresols CA	5	0.02 0.02	<0.01 <0.01
VECAS1702	Tanl	k T-37 (11)		VOC		0.13	<0.01
VECAS1703	Tanl	k T-38 (11)		VOC		<0.01	<0.01
VECAS1704	Tanl	k T-57 (11)		VOC		<0.01	<0.01
VECAS1705	Tanl	k T-58 (11)		VOC		<0.01	<0.01
VECAS19810	Tanl	k T-68 (11)		VOC		0.32	0.01
VECAS19811	Tanl	k T-69 (11)		VOC	<0.0	1 0.01	
VECAS1706	Tanl	k T-86 (11)		VOC	<0.0	1<0.01	
VECAS1603	Tanl	k T-151 (11)		VOC		<0.06	0.06

Page 12 VECAS1604 Tank T-152 (11) VOC < 0.12 0.03 S-86 Scrubber Cresols 0.02 < 0.01 SECAS1707 CA 0.01 < 0.01

Emission Point No. (1)	Source Air Contaminant <u>Emiss</u> Name (2) Name (3) lb/hr	ion Rates* TPY		
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
VECAS33E06	Tank T-96 (7)	VOC	<0.01	0.01
SECAS33E07	S-96 Scrubber	Cresols CA	0.03 0.03	<0.01 <0.01
SERSDUS03	S-190 Scrubber	CA VOC	<0.01 <0.01	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 CA	0.07 0.03	0.01 <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 CA	<0.01 <0.01	<0.01 <0.01
VEOXRU04	Tank T-201 (12)	VOC	<0.01	<0.01
VEOXRU05	Tank T-280 (12)	VOC	<0.01	<0.01

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VEOXRU06	Tank T-283 (12)	VOC	0.32	0.02
VEOXRU07	Tank T-284 (12)	VOC	<0.01	0.03

Emission Point No. (1)	Source Ai	r Contaminant Name (3)	Emission R Ib/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 CA	0.03 <0.01	<0.01 <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
 - NOx total oxides of nitrogen
 - PM10 particulate matter less than 10 microns
 - SOx 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.
 - * Emission rates are based on and the facilities are limited by the following maximum operating schedule:

Hrs/day	Davs/week	Weeks/year	or Hrs/year 8,760	
mis/uav	Davs/week	vveeks/vear	UL DIS/VEGLO./UU	

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