

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 22434

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		Air Contaminant		<u>Emission Rates *</u>	
	Name (2)	Name (3)	lb/hr	TPY		
TNK4	Tank 4			VOC	0.27	0.04
TNK6	Tank 6			VOC	0.06	0.21
TNK7	Tank 7			VOC	0.06	0.10
TNK8	Tank 8			VOC	0.06	0.11
TNK9	Tank 9			VOC	2.15	5.39
TNK10	Tank 10			VOC	1.73	4.29
TNK15	Tank 15			VOC	<0.01	0.08
TNK16	Tank 16			VOC	0.09	0.23
TNK17	Tank 17			VOC	0.09	0.19
TNK18	Tank 18			VOC	0.09	0.19
TNK19	Tank 19			VOC	0.86	2.55
TNK20A	Tank 20A			VOC	0.29	<0.01
TNK20B	Tank 20B			VOC	0.29	<0.01
TNK23	Tank 23			VOC	0.81	0.46
TNK25	Tank 25			VOC	0.71	2.42
TNK27	Tank 27			VOC	<0.01	0.09

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

TNK30	Tank 30	VOC	0.74	2.76
TNK31	Tank 31	VOC	0.74	2.76
TNK32	Tank 32	VOC	1.07	3.16
TNK33	Tank 33	VOC	1.07	3.27
TNK34	Tank 34	VOC	0.95	0.51
TNK39	Tank 39	VOC	5.71	10.83
TNK40	Tank 40	VOC	0.02	0.10
TNK41	Tank 41	VOC	0.02	0.10
TNK46	Tank 46	VOC	1.66	4.15
TNK47	Tank 47	VOC	0.02	0.29
TNK60	Tank 60	VOC	0.98	2.41
TNK60	Tank 61	VOC	0.98	2.41
TNK62	Tank 62	VOC	0.98	2.41
TNK63	Tank 63	VOC	0.98	2.41
NFUG	Tank Farm North Area (4)	VOC	1.00	3.16
NEFUG	Tank Farm Northeast Area (4)	VOC	0.14	0.60
NWFUG	Tank Farm Northwest Area (4)	VOC	1.67	7.27
SWFUG	Tank Farm Southwest Area (4)	VOC	0.69	2.98

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

SRUNLOD	Sour Condensate Unloading Fugitives (4)	VOC	0.04	0.16
		Mercaptans	<0.01	<0.01
		H ₂ S	<0.01	<0.01
UNLOAD	Truck Unloading Fugitives	VOC	0.43	1.88
LOLOAD	Truck Loading Fugitives (4)	VOC	0.26	1.24
VACUNIT	Vacuum Unit Fugitives (4)	VOC	0.15	0.66
CRUDE	Crude Unit Fugitives (4)	VOC	2.18	9.56
UNIFINER	Unifiner/Penex Fugitives (4)	VOC	1.67	7.31
POWERF	Hydrofiner/Powerformer Fugitives (4)	VOC	1.18	5.19
LPGUNIT	LPG Unit Fugitives (4)	VOC	0.78	3.46
SWEETN	Sweetening Unit Fugitives (4)	VOC	0.19	0.83
		Mercaptans	<0.01	<0.01
		H ₂ S	<0.01	<0.01
CONDFD	Condensate Feed Tanks Fugitives (4)	VOC	0.13	0.55
FUELGAS	Fuel Gas System Fugitives (4)	VOC	1.78	7.79
H10	Prefract Heater	VOC	0.04	0.17
		NO _x	1.99	8.72
		SO ₂	0.38	1.68
		CO	0.50	2.18
		PM	0.07	0.31

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

H11	Crude Heater	VOC	0.16	0.69
		NO _x	7.89	34.54
		SO ₂	1.52	6.63
		CO	1.97	8.63
		PM	0.28	1.23
H30	Vacuum Heater	VOC	0.06	0.27
		NO _x	3.05	13.35
		SO ₂	0.59	2.56
		CO	0.76	3.34
		PM	0.11	0.48
H31	Vacuum Preheater	VOC	0.06	0.26
		NO _x	3.00	13.15
		SO ₂	0.58	2.53
		CO	0.75	3.29
		PM	0.11	0.47
H101	Regeneration Gas Heater	VOC	0.01	0.05
		NO _x	0.23	1.01
		SO ₂	0.06	0.27
		CO	0.05	0.20
		PM	0.01	0.05
H102	Hot Oil Heater	VOC	0.03	0.15
		NO _x	1.68	7.35
		SO ₂	0.32	1.41
		CO	0.42	1.84
		PM	0.06	0.26
H201	Unifiner Heater	VOC	0.04	0.19
		NO _x	0.83	3.64
		SO ₂	0.22	0.98
		CO	0.17	0.73
		PM	0.04	0.18
H1101	Reformer Heater	VOC	0.13	0.59
		NO _x	6.71	29.39
		SO ₂	1.29	5.64

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

		CO	1.68	7.35
		PM	0.24	1.05
H1103	Hydrofiner Heater	VOC	0.03	0.15
		NO _x	1.72	7.51
		SO ₂	0.33	1.44
		CO	0.43	1.88
		PM	0.06	0.27
NBOILER	North Boiler	VOC	0.05	0.23
		NO _x	2.67	11.67
		SO ₂	0.51	2.24
		CO	0.67	2.92
		PM	0.10	0.42
SBOILER	South Boiler	VOC	0.04	0.18
		NO _x	2.01	8.79
		SO ₂	0.39	1.69
		CO	0.50	2.20
		PM	0.07	0.31
MFLARE	Main Flare	VOC	2.07	8.19
		NO _x	0.29	1.17
		SO ₂	0.03	0.15
		CO	0.56	2.21
SFLARE	Loading Rack Flare	VOC	5.73	8.85
		NO _x	0.79	1.26
		SO ₂	<0.01	0.02
		CO	1.54	2.39
C-1	Unifiner Compressor	VOC	0.26	1.15
		NO _x	3.36	14.72
		SO ₂	<0.01	<0.01
		CO	2.20	9.65
C-2	Unifiner Compressor	VOC	0.26	1.15
		NO _x	3.36	14.72
		SO ₂	<0.01	<0.01
		CO	2.20	9.65

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

C-3	Unifiner Compressor	VOC	0.26	1.15
		NO _x	3.36	14.72
		SO ₂	<0.01	<0.01
		CO	2.20	9.65
C-401	Powerformer Compressor	VOC	0.35	1.53
		NO _x	4.48	19.63
		SO ₂	<0.01	<0.01
		CO	2.94	12.86
C-402	Powerformer Compressor	VOC	0.35	1.53
		NO _x	4.48	19.63
		SO ₂	<0.01	<0.01
		CO	2.94	12.86
C-405	Powerformer Compressor	VOC	0.48	2.10
		NO _x	8.20	35.91
		SO ₂	<0.01	<0.01
		CO	2.44	10.71
CRCOOL1	Crude Cooling Tower	VOC	0.06	0.25
CRCOOL2	Crude Cooling Tower	VOC	0.06	0.25
CRCOOL3	Crude Cooling Tower	VOC	0.06	0.25
HYCOOL1	Hydrofiner Cooling Tower	VOC	0.08	0.34
HYCOOL2	Hydrofiner Cooling Tower	VOC	0.08	0.34
LPGCOOL	LPG Cooling Tower	VOC	0.05	0.23
AIRPOND	Aeration Pond	VOC	<0.01	<0.01

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

(2) Specific point source name. For fugitive sources use area name or fugitive source name.

- (3) PM - particulate matter
VOC - volatile organic compounds as defined in General Rule 101.1
NO_x - total oxides of nitrogen
SO₂ - sulfur dioxide
CO - carbon monoxide

(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