

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 3295

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
TK-1	Tank 1	VOC	0.22	0.96
TK-2	Tank 2	VOC	1.40	4.00
TK-3	Tank 3	VOC	0.68	2.53
TK-4	Tank 4	VOC	0.66	2.89
TK-7	Tank 7	VOC	3.12	0.27
TK-8	Tank 8	SB	0.11	0.02
TK-9	Tank 9	SB	0.06	0.02

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission * Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates</u>	
			<u>lb/hr</u>	<u>TPY</u>
TK-10	Tank 10	VOC	0.69	0.41
TK-11	Tank 11	VOC	0.69	0.41
TK-12	Tank 12	VOC	0.69	0.41
TK-13	Tank 13	VOC	0.69	0.41
TK-14	Tank 14	VOC	3.20	0.56
TK-15	Tank 15	VOC	0.69	0.41
TK-16	Tank 16	VOC	0.69	0.41
TK-18	Tank 18	VOC	0.68	1.30
TK-28	Tank 28	VOC	0.40	0.42
TK-31	Tank 31	VOC	0.68	0.25
TK-32	Tank 32	VOC	0.60	0.06
TK-33	Tank 33	VOC	0.60	0.06
TK-34	Tank 34	SB	0.01	0.01
TK-37	Tank 37	VOC	0.60	0.06
TK-38	Tank 38	VOC	0.60	0.06
TK-39	Tank 39	VOC	0.60	0.06
TK-40	Tank 40	VOC	0.36	1.56
TK-41	Tank 41	VOC	0.36	1.56
TK-42	Tank 42	VOC	2.09	0.23

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
TK-45	Tank 45	VOC	0.69	0.37
TK-48	Tank 48	VOC	0.42	1.83
TK-52	Tank 52	VOC	5.02	8.26
TK-53	Tank 53	VOC	10.5	10.6
TK-54	Tank 54	VOC	0.99	4.30
TK-55	Tank 55	VOC	1.7	4.66
TK-56	Tank 56	VOC	1.2	3.53
TK-57	Tank 57	VOC	1.37	4.5
TK-61	Tank 61	VOC	1.37	4.5
TK-62	Tank 62	VOC	1.01	1.40
TK-63	Tank 63	VOC	0.65	0.94
TK-64	Tank 64	VOC	1.11	4.51
TK-65	Tank 65	VOC	0.12	1.49
TK-66	Tank 66	VOC	0.91	3.98
TK-67	Tank 67	NaOH	<0.01	<0.01
TK-68	Tank 68	NaOH	<0.01	<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	TPY
TK-69	Tank 69	NaOH	<0.01	<0.01
TK-70	Tank 70	NaOH	<0.01	<0.01
DIB-1	Heater	PM	<0.01	0.02
		SO ₂	<0.04	<0.01
		NO _x	0.20	0.88
		CO	0.05	0.22
		VOC	<0.01	0.02
H-Penex	Heater	PM	<0.01	0.04
		SO ₂	0.08	<0.01
		NO _x	0.40	1.77
		CO	0.10	0.44
		VOC	<0.01	0.04
DIB-3	Heater	PM	<0.01	0.02
		SO ₂	0.04	<0.01
		NO _x	0.20	0.88
		CO	0.05	0.22
		VOC	<0.01	0.02
DIB-2	Heater	PM	<0.01	0.02
		SO ₂	0.04	<0.01
		NO _x	0.20	0.88
		CO	0.05	0.22
		VOC	<0.01	0.02
H-1	Heater	PM	<0.01	0.02
		SO ₂	0.05	<0.01
		NO _x	0.24	1.06
		CO	0.06	0.26
		VOC	<0.01	0.02
WP-H300	Heater	PM	0.03	0.14
		SO ₂	0.28	0.03
		NO _x	1.45	6.36
		CO	0.36	1.59

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	0.03	0.13
B-3	Heater	PM	0.04	0.15
		SO ₂	0.31	0.03
		NO _x	1.61	7.06
		CO	0.40	1.77
		VOC	0.03	0.14
Hot-Oil-1	Heater	PM	0.04	0.20
		SO ₂	0.40	0.04
		NO _x	2.08	9.11
		CO	0.52	2.28
		VOC	0.04	0.18
B-1	Boiler	PM	0.04	0.18
		SO ₂	0.37	0.04
		NO _x	1.94	8.48
		CO	0.48	2.12
		VOC	0.04	0.17
CATRGN 1	Heater	PM	<0.01	0.02
		SO ₂	0.03	<0.01
		NO _x	0.16	0.71
		CO	0.04	0.18
		VOC	<0.01	0.01
CATRGN 2	Heater	PM	<0.01	0.02
		SO ₂	0.03	<0.01
		NO _x	0.16	0.71
		CO	0.04	0.18
		VOC	<0.01	0.01

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission *	Source	Air Contaminant	Emission Rates	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
H-STB	Heater	PM	0.01	0.04
		SO ₂	0.07	0.01
		NO _x	0.37	1.62
		CO	0.09	0.41
		VOC	0.01	0.03
H-101	Heater	PM	0.06	0.28
		SO ₂	0.57	0.06
		NO _x	2.97	13.00
		CO	0.74	3.25
		VOC	0.07	0.29
H-102	Heater	PM	0.04	0.17
		SO ₂	0.34	0.03
		NO _x	1.78	7.77
		CO	0.44	1.94
		VOC	0.04	0.16
H-103	Heater	PM	0.04	0.17
		SO ₂	0.35	0.04
		NO _x	1.77	7.77
		CO	0.45	1.94
		VOC	0.04	0.16
RH-1	Heater	PM	0.04	0.17
		SO ₂	0.35	0.04
		NO _x	1.84	8.05
		CO	0.46	2.01
		VOC	0.04	0.16

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission *	Source	Air Contaminant	<u>Emission Rates</u>	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
RH-2	Heater	PM	0.03	0.12
		SO ₂	0.25	0.03
		NO _x	1.26	5.51
		CO	0.32	1.38
		VOC	0.03	0.11
RH-3	Heater	PM	0.02	0.06
		SO ₂	0.13	0.02
		NO _x	0.65	2.83
		CO	0.16	0.71
		VOC	0.02	0.06
B-2	Reboiler	PM	0.02	0.08
		SO ₂	0.16	0.02
		NO _x	0.81	3.53
		CO	0.21	0.88
		VOC	0.02	0.07
H-7	Heater	PM	0.02	0.06
		SO ₂	0.11	0.02
		NO _x	0.57	2.47
		CO	0.15	0.62
		VOC	0.02	0.05
H-244	Heater	PM	0.02	0.07
		SO ₂	0.13	0.02
		NO _x	0.65	2.83
		CO	0.17	0.71
		VOC	0.02	0.06

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
H-243	Heater	PM	0.02	0.06
		SO ₂	0.11	0.02
		NO _x	0.57	2.47
		CO	0.15	0.62
		VOC	0.02	0.05
H-242	Heater	PM	0.02	0.07
		SO ₂	0.13	0.02
		NO _x	0.65	2.83
		CO	0.17	0.71
		VOC	0.02	0.06
H-TRT	Heater	PM	0.04	0.15
		SO ₂	0.30	0.03
		NO _x	1.53	6.71
		CO	0.39	1.68
		VOC	0.04	0.13
H-PREFAC	Heater	PM	0.01	0.04
		SO ₂	0.08	0.01
		NO _x	0.41	1.77
		CO	0.11	0.44
		VOC	0.01	0.04
H-B	Heater	PM	0.02	0.07
		SO ₂	0.13	0.02
		NO _x	0.65	2.83
		CO	0.17	0.71
		VOC	0.02	0.06
H-A	Heater	PM	0.04	0.15
		SO ₂	0.31	0.03
		NO _x	1.61	7.06

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
		CO	0.40	1.77
		VOC	0.03	0.14
IC4-RGN	Heater	PM	<0.01	<0.01
		SO ₂	0.02	<0.01
		NO _x	0.08	0.35
		CO	0.02	0.09
		VOC	<0.01	0.01
F-2	Flare	NO _x	0.10	0.40
		CO	0.10	0.40
		VOC	0.95	0.61
DR-1	Drum Filling	VOC	1.60	0.40
FUG	Fugitives (4)	VOC	8.81	38.7

(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 General Rule 101.1

NO_x - total oxides of nitrogen

SO₂ - sulfur dioxide

PM - particulate matter (PM) 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.

Permit No. 3295

Page 10

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

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

CO - carbon monoxide

SB - sodium biosulfate

NaOH - sodium hydroxide

(4) Fugitive emissions are an estimate only and should not be considered as maximum allowable emission rates.

* 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_____