

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 3158

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 a 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)	<u>Emission Rates</u>	
			lb/hr	TPY
1	Acid Gas Flare (5)	EMERGENCY USE ONLY		
2	Spare Regeneration Heater (6)	NO <sub>x</sub>	0.19	0.58
		CO	0.04	0.12
		VOC	0.01	0.03
		SO <sub>2</sub>	0.03	0.08
3	Hot Oil Heater	NO <sub>x</sub>	1.07	3.34
		CO	0.21	0.67
		VOC	0.06	0.18
		SO <sub>2</sub>	0.15	0.48
4	Old Plant Emergency Flare (5)	EMERGENCY USE ONLY		
6	Acid Gas Incinerator (7)	NO <sub>x</sub>	0.74	2.33
		CO	5.42	23.74
		VOC	0.04	0.12
		SO <sub>2</sub>	147.22	
	644.84	H <sub>2</sub> S	0.79	3.47
37	Steam Boiler	NO <sub>x</sub>	0.17	0.52
		CO	0.03	0.10
		VOC	0.01	0.03
		SO <sub>2</sub>	0.02	0.07
41/42	600-HP Clark RA-6	NO <sub>x</sub>	26.43	

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## AIR CONTAMINANTS DATA

Emission *	Source	Air Contaminant	Emission	Rates
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
	115.76	CO	1.85	8.10
		VOC	1.32	5.78
		SO <sub>2</sub>	0.08	0.35
43/44	600-HP Clark RA-6 115.76	NO <sub>x</sub>	26.43	
		CO	1.85	8.10
		VOC	1.32	5.78
		SO <sub>2</sub>	0.08	0.35
45/46	600-HP Clark RA-6 115.76	NO <sub>x</sub>	26.43	
		CO	1.85	8.10
		VOC	1.32	5.78
		SO <sub>2</sub>	0.08	0.35
47/48	600-HP Clark RA-6 115.76	NO <sub>x</sub>	26.43	
		CO	1.85	8.10
		VOC	1.32	5.78
		SO <sub>2</sub>	0.08	0.35
50/51	600-HP Clark RA-6 115.76	NO <sub>x</sub>	26.43	
		CO	1.85	8.10
		VOC	1.32	5.78
		SO <sub>2</sub>	0.08	0.35
52	660-HP Worthington 58-2 114.62	SLHC	NO <sub>x</sub>	26.17
		CO	2.91	12.75
		VOC	2.91	12.75

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Emission * Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hr	TPY
		SO <sub>2</sub>	0.09	0.39
53	660-HP Worthington 58-2 114.62	SLHC	NO <sub>x</sub>	26.17
		CO	2.91	12.75
		VOC	2.91	12.75
		SO <sub>2</sub>	0.09	0.39
54	660-HP Worthington 58-2 114.62	SLHC	NO <sub>x</sub>	26.17
		CO	2.91	12.75
		VOC	2.91	12.75
		SO <sub>2</sub>	0.09	0.39
55	1,100-HP White Superior 8-GTLA	NO <sub>x</sub>	4.90	21.50
		CO	7.30	32.00
		VOC	1.80	8.00
		SO <sub>2</sub>	0.11	0.50
61	2,000-HP White Superior 12-SGTA	NO <sub>x</sub>	8.81	38.59
		CO	7.05	30.88
		VOC	1.41	6.18
		SO <sub>2</sub>	0.27	1.18
62	2,000-HP White Superior 12-SGTA	NO <sub>x</sub>	8.81	38.59
		CO	7.05	30.88
		VOC	1.41	6.18
		SO <sub>2</sub>	0.27	1.18
63	2,000-HP White Superior 12-SGTA	NO <sub>x</sub>	8.81	38.59
		CO	7.05	30.88
		VOC	1.41	6.18
		SO <sub>2</sub>	0.27	1.18

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69	Old Regeneration Heater	NO <sub>x</sub>	0.19	0.58
		CO	0.04	0.12
		VOC	0.01	0.03
		SO <sub>2</sub>	0.03	0.08
77	4.5 MMBtu Amine Reboiler	NO <sub>x</sub>	0.60	1.88
		CO	0.12	0.38
		VOC	0.03	0.10
		SO <sub>2</sub>	0.09	0.27
78	4.5 MMBtu Amine Reboiler	NO <sub>x</sub>	0.60	1.88
		CO	0.12	0.38
		VOC	0.03	0.10
		SO <sub>2</sub>	0.09	0.27
100	Processes Fugitives (4)		VOC	7.41 32.44
(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 <sub>x</sub> - total oxides of nitrogen			
	SO <sub>2</sub> - sulfur dioxide			
	CO - carbon monoxide			
(4)	Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.			
(5)	The acid gas flare and the old plant emergency flare shall be used only for emergency (start-up, shutdown, upset, and maintenance) conditions.			
(6)	Annual emissions from Emission Point Nos. (EPNs) 2 and 69 in combination shall not exceed the annual emissions allowable of EPN 69.			
(7)	Acid gas incinerator emissions are based on an input to the SRU of a maximum of 1,900 lbs/hr of sulfur.			

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AIR CONTAMINANTS DATA

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

\* 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 \_\_\_\_\_