

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 5452

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, sources, and related activities. 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	
			lbs/hour	TPY (4)
F-A1	Furnace A-West Stack	CO	3.67	16.08
		NO <sub>x</sub>	12.24	53.61
		PM <sub>10</sub>	0.33	1.46
		SO <sub>2</sub>	0.03	0.11
		VOC	0.24	1.05
F-A2	Furnace A-Center Stack	CO	3.67	16.08
		NO <sub>x</sub>	12.24	53.61
		PM <sub>10</sub>	0.33	1.46
		SO <sub>2</sub>	0.03	0.11
		VOC	0.24	1.05
F-A3	Furnace A-East Stack	CO	3.67	16.08
		NO <sub>x</sub>	12.24	53.61
		PM <sub>10</sub>	0.33	1.46
		SO <sub>2</sub>	0.03	0.11
		VOC	0.24	1.05
F-B	Furnace B (8)	CO	5.34	23.40
		NO <sub>x</sub>	6.85	30.00
		PM <sub>10</sub>	1.14	4.98
		SO <sub>2</sub>	0.09	0.39
		VOC	0.82	3.61

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F-CD	Hydrotreater Oil and Feed Heater Stack (6)	CO	7.29	31.93
		NO <sub>x</sub>	4.59	20.10
		PM <sub>10</sub>	1.05	4.59
		SO <sub>2</sub>	0.08	0.36
		VOC	0.76	3.32
GLY-1	Glycol Unit Regen Stack	VOC	1.92	8.50
B-08	No. 8 Boiler Stack	CO	18.64	81.63
		NO <sub>x</sub>	12.30	53.87
		PM <sub>10</sub>	1.59	6.96
		SO <sub>2</sub>	0.12	0.53
		VOC	1.15	5.04
FLR-1	Planned MSS Gas Stabilizer Unit (7)	CO	15.05	0.01
		H <sub>2</sub> S	0.01	0.01
		NO <sub>x</sub>	7.54	0.01
		SO <sub>2</sub>	0.15	0.01
		VOC	20.80	0.03
FLR-N	Planned MSS Gas Stabilizer Unit (7)	CO	15.05	0.01
		H <sub>2</sub> S	0.01	0.01
		NO <sub>x</sub>	7.54	0.01
		SO <sub>2</sub>	0.15	0.01
		VOC	20.80	0.03
FLR-S	Planned MSS Gas Stabilizer Unit (7)	CO	15.05	0.01
		H <sub>2</sub> S	0.01	0.01
		NO <sub>x</sub>	7.54	0.01
		SO <sub>2</sub>	0.15	0.01

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		VOC	20.80	0.03
GS-MSS	Planned MSS Gas Stabilizer Unit Atmospheric Emissions	H <sub>2</sub> S	0.88	0.01
		VOC	50.07	0.01
FUG-FRAC	Frac Plant Fugitives (5)	VOC	34.95	153.10
FUG-IMP	Imports Unit Fugitives (5)	VOC	8.06	35.34
FUG-HYDRO	Hydrotreater Unit Fugitives (5)	H <sub>2</sub> S	0.01	0.01
		VOC	1.59	6.95
FUG-C6	Stabilizer Project Process Fugitives (5)	VOC	0.33	1.45
FUG-FGRU	FGRU Fugitives (5)	VOC	0.11	0.50

- (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  
H<sub>2</sub>S - hydrogen sulfide  
NO<sub>x</sub> - total oxides of nitrogen  
PM<sub>10</sub> - total particulate matter equal to or less than 10 microns in diameter  
SO<sub>2</sub> - sulfur dioxide  
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
- (6) The Hydrotreater Oil and Feed Heater Stack (EPN F-CD) is a combined stack for Heater F-C (97 MMBtu/hr) and Heater F-D (38 MMBtu/hr).
- (7) Planned maintenance, startup, and shutdown (MSS) activities and emissions are authorized from the gasoline stabilizer production unit. These emissions are sent to the designated EPN up to a maximum of 15 hours per rolling 12-month period.
- (8) MSS emissions are included. They are based on 1 event per month, and 12 hours per event, for a total of 144 hours per year.

Date: August 28, 2012