

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 56134

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)
HTRSTK	Process Heater 751	NO <sub>x</sub>	2.14	9.38
		VOC	0.34	1.49
		CO	0.68	2.98
		SO <sub>2</sub>	0.06	0.25
		PM	0.24	1.06
		PM <sub>10</sub>	0.24	1.06
		PM <sub>2.5</sub>	0.24	1.06
HTRSTK	Process Heater 752	NO <sub>x</sub>	0.86	3.75
		VOC	0.14	0.60
		CO	0.27	1.19
		SO <sub>2</sub>	0.02	0.10
		PM	1.00	0.42
		PM <sub>10</sub>	1.00	0.42
		PM <sub>2.5</sub>	1.00	0.42
HTRSTK	Process Heater 753	NO <sub>x</sub>	0.51	2.24
		VOC	0.08	0.35
		CO	1.48	6.49
		SO <sub>2</sub>	0.01	0.06
		PM	0.06	0.25
		PM <sub>10</sub>	0.06	0.25

## Emission Sources - Maximum Allowable Emission Rates

		PM <sub>2.5</sub>	0.06	0.25
HTRSTK	Process Heater 754	NO <sub>x</sub>	2.55	11.15
		VOC	0.40	1.77
		CO	0.81	3.54
		SO <sub>2</sub>	0.07	0.30
		PM	0.29	1.26
		PM <sub>10</sub>	0.29	1.26
		PM <sub>2.5</sub>	0.29	1.26
HTRSTK	Process Heater 756	NO <sub>x</sub>	2.42	10.60
		VOC	0.38	1.68
		CO	0.77	3.36
		SO <sub>2</sub>	0.07	0.29
		PM	0.27	1.19
		PM <sub>10</sub>	0.27	1.19
		PM <sub>2.5</sub>	0.27	1.19
CTW	Non-Contact Cooling Tower	PM	0.97	4.25
		PM <sub>10</sub>	0.97	4.25
		PM <sub>2.5</sub>	0.97	4.25
FL1 (6)	Flare Pilot and Sweep	NO <sub>x</sub>	0.04	0.16
		VOC	0.03	0.14
		CO	0.31	1.38
		SO <sub>2</sub>	0.01	0.01
MDEA-TK	Amine Tank	VOC	0.01	0.01
FUG (5)	Process Piping Fugitives	VOC	0.76	3.33
		CO	8.21	35.95

Emission Sources - Maximum Allowable Emission Rates

POX1PH	POX1 Cold Start-Up Burner	NO <sub>x</sub>	0.87	0.15
		VOC	0.05	0.01
		CO	0.73	0.12
		SO <sub>2</sub>	0.01	0.01
		PM	0.07	0.01
		PM <sub>10</sub>	0.07	0.01
		PM <sub>2.5</sub>	0.07	0.01
POX2PH	POX2 Cold Start-Up Burner	NO <sub>x</sub>	0.87	0.15
		VOC	0.05	0.01
		CO	0.73	0.12
		SO <sub>2</sub>	0.01	0.01
		PM	0.07	0.01
		PM <sub>10</sub>	0.07	0.01
		PM <sub>2.5</sub>	0.07	0.01
POX1	POX1 CO <sub>2</sub> Start-Up	CO	8.19	0.30
POX2	POX2 CO <sub>2</sub> Start-Up	CO	8.19	0.30
STRP-OVHD	Stripper Overhead	CO	51.87	5.35
FL1 (6)	Plant MSS Venting to Flare	NO <sub>x</sub>	34.61	1.20
		VOC	12.99	0.08
		CO	1,200.00	39.15
		SO <sub>2</sub>	0.41	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) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
- NO<sub>x</sub> - total oxides of nitrogen
- SO<sub>2</sub> - sulfur dioxide
- PM - total particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>, as represented

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PM<sub>10</sub> - total particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>, as represented

PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter

CO - carbon monoxide

(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) Total emissions from the Flare (EPN FL1) are the sum of the pilot and sweep, and venting to flare emissions.

Date: August 10, 2015