

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 108226

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)
N-36-01	Hot Oil Heater	VOC	0.78	3.24
		CO	5.17	21.57
		NO <sub>x</sub>	5.04	17.12
		SO <sub>2</sub>	1.99	8.29
		PM	1.07	4.48
		PM <sub>10</sub>	1.07	4.48
		PM <sub>2.5</sub>	1.07	4.48
N-36-02	Regeneration Heater	VOC	0.18	0.24
		CO	1.23	1.63
		NO <sub>x</sub>	1.20	1.59
		SO <sub>2</sub>	0.47	0.63
		PM	0.26	0.34
		PM <sub>10</sub>	0.26	0.34
		PM <sub>2.5</sub>	0.26	0.34
N-36-03	Thermal Oxidizer	VOC	0.82	3.59
		CO	1.56	6.84
		NO <sub>x</sub>	1.25	5.47
		SO <sub>2</sub>	4.52	19.81
		PM	0.16	0.68
		PM <sub>10</sub>	0.16	0.68

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		PM <sub>2.5</sub>	0.16	0.68
N-95-29	Storage Tank	VOC	0.01	0.01
N-95-30	Storage Tank	VOC	0.01	0.01
N-RLOAD	Railcar Loading	VOC	0.23	0.06
N-CLTWR	Cooling Tower (5)	VOC	2.38	1.46
		PM	0.22	0.44
		PM <sub>10</sub>	0.22	0.44
		PM <sub>2.5</sub>	0.06	0.18
N-FUG	Fugitives (5)	VOC	3.10	13.58
N-FLR	Flare (Normal Operations)	VOC	0.03	0.15
		CO	0.57	2.50
		NO <sub>x</sub>	0.08	0.35
		SO <sub>2</sub>	0.01	0.01
MAINTENANCE, STARTUP, AND SHUTDOWN (MSS) ACTIVITIES				
N-FLR-MSS	Flare (Controlled Process Vessel Degassing)	VOC	313.49	-
		CO	165.79	-
		NO <sub>x</sub>	22.95	-
		SO <sub>2</sub>	5.18	-
STO-CAS-MSS	Temporary Storage Carbon Adsorption System (CAS)	VOC	1.42	-
VAC-TRK-MSS	Vacuum Trucks	VOC	0.07	-
MSS-CAP	MSS Annual Emissions Caps	VOC	-	1.57

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		CO	-	1.10
		NO <sub>x</sub>	-	0.15
		SO <sub>2</sub>	-	0.03

- (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
- CO - carbon monoxide
- 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
- 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
- (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.

Date: January 15, 2014