

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 144873

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)
HR15.301	Oleflex Heater	NO <sub>x</sub> (routine)	3.55	11.96
		NO <sub>x</sub> (startup and shutdown)	14.19	
		CO	22.49	37.88
		VOC	1.91	6.45
		SO <sub>2</sub>	0.23	0.76
		PM	2.64	8.91
		PM <sub>10</sub>	2.64	8.91
		PM <sub>2.5</sub>	2.64	8.91
		NH <sub>3</sub>	1.36	4.60
HR15.602	Hot Oil Heater	NO <sub>x</sub>	1.30	2.52
		CO	2.28	2.22
		VOC	0.19	0.38
		SO <sub>2</sub>	0.02	0.04
		PM	0.27	0.52
		PM <sub>10</sub>	0.27	0.52
		PM <sub>2.5</sub>	0.27	0.52
WSAC	Wet Surface Air Cooler	PM	2.53	9.50
		PM <sub>10</sub>	1.10	4.75
		PM <sub>2.5</sub>	0.01	0.02
FUG-IBDH	Process Area Fugitives (5)	VOC	1.94	8.49
FUG-NGAS	Natural Gas Fugitives (5)	VOC	0.16	0.69
FUG-SCR	Aqueous Ammonia Fugitives (5)	NH <sub>3</sub>	0.02	0.08
SV19.802	Spent Caustic Storage Tank	VOC	0.48	0.01

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SV19.803	Recoverable Oil Storage Tank	VOC	0.48	<0.01
SV19.955	Waste Water Surge Tank	VOC	0.01	<0.01
LO-1/2/3	Truck Loading (3 spots)	VOC	1.77	0.33
PV17.805	CCR Scrubber Vent	NO <sub>x</sub>	0.15	0.51
		CO	0.30	1.04
		VOC	0.12	0.40
		SO <sub>2</sub>	0.19	0.66
		PM	0.06	0.20
		PM <sub>10</sub>	0.06	0.20
		PM <sub>2.5</sub>	0.06	0.20
		HCl	0.10	0.33
		CL <sub>2</sub>	0.09	0.29
CATMSS	Catalyst Transfers	PM	0.86	0.03
		PM <sub>10</sub>	0.86	0.03
		PM <sub>2.5</sub>	0.13	0.01
SK25.901	Flare	NO <sub>x</sub>	1.48	4.72
		CO	11.91	37.05
		VOC	3.49	6.12
		SO <sub>2</sub>	0.01	0.04
SK25.901	Flare (MSS)	NO <sub>x</sub>	221.44	8.78
		CO	881.92	21.47
		VOC	1,497.30	11.85
		SO <sub>2</sub>	0.95	0.09
MSS-IBDH	MSS Equipment Clearing (6)	VOC	46.65	0.23
MSS-VAC	MSS Vacuum Trucks	VOC	0.51	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  
NO<sub>x</sub> - total oxides of nitrogen

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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
CO	- carbon monoxide
HCl	- hydrogen chloride
CL <sub>2</sub>	- chlorine gas
NH <sub>3</sub>	- aqueous ammonia

- (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) Planned MSS clearing to atmosphere includes 2.05 lbs/hr and 0.096 tpy of VOC for Inherently Low Emitting Activities in Attachment A of the Special Condition which shall be assumed to occur during every hour and 12 month rolling period of compliance evaluation.

Date: November 30, 2021