

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 160717

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-1001	HDT Feed Heater	NO <sub>x</sub>	0.24	1.04
		CO	0.75	3.3
		VOC	0.14	0.62
		SO <sub>2</sub>	0.08	0.33
		PM	0.19	0.84
		PM <sub>10</sub>	0.19	0.84
		PM <sub>2.5</sub>	0.19	0.84
		H <sub>2</sub> S	< 0.01	< 0.01
PA-2404	Boiler	NO <sub>x</sub>	0.48	2.09
		CO	1.51	6.61
		VOC	0.28	1.23
		SO <sub>2</sub>	0.15	0.67
		PM	0.39	1.69
		PM <sub>10</sub>	0.39	1.69
		PM <sub>2.5</sub>	0.39	1.69
		H <sub>2</sub> S	< 0.01	0.01
		NH <sub>3</sub>	0.18	0.8
PA-1801	Flare-Routine	NO <sub>x</sub>	0.03	0.11
		CO	0.22	0.96
		VOC	0.06	0.26
		SO <sub>2</sub>	< 0.01	< 0.01
		H <sub>2</sub> S	< 0.01	< 0.01
FWP-A	Diesel Firewater Pump A	NO <sub>x</sub>	0.99	0.05
		CO	1.23	0.06

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		VOC	0.38	0.02
		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
FWP-B	Diesel Firewater Pump B	NO <sub>x</sub>	0.99	0.05
		CO	1.23	0.06
		VOC	0.38	0.02
		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
INCIN-1	SRU TGTU Incinerator	NO <sub>x</sub>	0.39	1.69
		CO	0.2	0.89
		VOC	0.04	0.17
		SO <sub>2</sub>	7.05	30.86
		PM	0.05	0.23
		PM <sub>10</sub>	0.05	0.23
		PM <sub>2.5</sub>	0.05	0.23
		H <sub>2</sub> S	0.05	0.22
PA-1802	VCU POC from Combustion of Controlled Vents	NO <sub>x</sub>	0.18	0.79
		CO	0.10	0.42
		VOC	0.70	0.15
		SO <sub>2</sub>	0.01	0.04
		PM	0.02	0.11
		PM <sub>10</sub>	0.02	0.11
		PM <sub>2.5</sub>	0.02	0.11
		H <sub>2</sub> S	0.02	0.01
		NH <sub>3</sub>	< 0.01	< 0.01

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TK-1104	Diesel Tank	VOC	0.27	0.02
FWP-TK-A	FWP A Diesel Tank	VOC	0.01	< 0.01
FWP-TK-B	FWP B Diesel Tank	VOC	0.01	< 0.01
L-2601	Oily Water Sump	VOC	0.03	< 0.01
API-OIL-LD	API Recovered Oil Truck Loading	VOC	< 0.01	< 0.01
SULFUR-LD	Molten Sulfur Loading	H <sub>2</sub> S	0.01	0.04
PA-2327	Membrane Bioreactor	NO <sub>x</sub>	< 0.01	< 0.01
		VOC	0.01	0.03
		NH <sub>3</sub>	< 0.01	0.01
PA-2002	Cooling Tower	VOC	0.15	0.67
		PM	0.05	0.2
		PM <sub>10</sub>	0.03	0.12
		PM <sub>2.5</sub>	< 0.01	< 0.01
FUG-HDT	HDT Process Piping Fugitives (5)	VOC	1.56	6.83
		H <sub>2</sub> S	0.01	0.03
		NH <sub>3</sub>	< 0.01	< 0.01
FUG-SRU	SRU Process Piping Fugitives (5)	CO	< 0.01	< 0.01
		VOC	0.07	0.31
		SO <sub>2</sub>	< 0.01	0.01
		H <sub>2</sub> S	0.04	0.18
		NH <sub>3</sub>	0.01	0.04
FUG-OSBL1	OSBL Piping Fugitive Area 1 (5)	VOC	0.02	0.09
		H <sub>2</sub> S	< 0.01	0.01
		NH <sub>3</sub>	< 0.01	< 0.01
FUG-OSBL2	OSBL Piping Fugitive Area 2 (5)	VOC	0.06	0.24
		H <sub>2</sub> S	0.01	0.03
		NH <sub>3</sub>	< 0.01	0.01
FUG-OSBL3	OSBL Piping Fugitive	VOC	0.06	0.27

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		H <sub>2</sub> S	0.01	0.03
		NH <sub>3</sub>	< 0.01	0.01
PA-1801MSS	Flare MSS from HDT Process and Combustion	NO <sub>x</sub>	4.14	0.03
		CO	35.54	0.25
		VOC	5.18	0.04
		SO <sub>2</sub>	0.06	< 0.01
		H <sub>2</sub> S	< 0.01	< 0.01
INCIN-1MSS	SRU Process MSS to TGTU TO	NO <sub>x</sub>	0.28	0.03
		CO	0.15	0.01
		VOC	0.03	< 0.01
		SO <sub>2</sub>	0.01	< 0.01
		PM	0.04	< 0.01
		PM <sub>10</sub>	0.04	< 0.01
		PM <sub>2.5</sub>	0.04	< 0.01
		H <sub>2</sub> S	< 0.01	< 0.01
MSS-MISC	HDT and OSBL Atmospheric Equipment MSS	VOC	25.84	0.10

- (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
  - 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
  - H<sub>2</sub>S - hydrogen sulfide
  - NH<sub>3</sub> - 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.

Date: September 17, 2020