

Emission Sources - Maximum Allowable Emission Rates

Permit Number 170526

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

Air Contaminants Data				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
Phase I (6)				
HTR1	Heater 1 (114.4 MMBtu/hr)	NO _x	2.86	9.44
		CO	8.48	27.97
		VOC	0.62	2.04
		SO ₂	0.07	0.22
		PM	0.06	0.19
		PM ₁₀	0.06	0.19
		PM _{2.5}	0.05	0.19
HTR2	Heater 2 (118 MMBtu/hr)	NO _x	1.18	2.61
		CO	4.37	9.64
		VOC	0.64	1.40
		SO ₂	0.07	0.15
		PM	0.06	0.13
		PM ₁₀	0.06	0.13
		PM _{2.5}	0.05	0.13
HTR3	Heater 3 (118 MMBtu/hr)	NO _x	1.18	0.86
		CO	4.37	3.20
		VOC	0.64	0.48
		SO ₂	0.07	0.05
		PM	0.06	0.04
		PM ₁₀	0.06	0.04
		PM _{2.5}	0.05	0.04

Emission Sources - Maximum Allowable Emission Rates

Phase 2 (7)				
HTR1	Heater 1 (118 MMBtu/hr)	NO _x	1.18	5.17
		CO	4.37	19.12
		VOC	0.64	2.79
		SO ₂	0.07	0.30
		PM	0.06	0.26
		PM ₁₀	0.06	0.26
		PM _{2.5}	0.05	0.22
HTR2	Heater 2 (118 MMBtu/hr)	NO _x	1.18	5.17
		CO	4.37	19.12
		VOC	0.64	2.79
		SO ₂	0.07	0.30
		PM	0.06	0.26
		PM ₁₀	0.06	0.26
		PM _{2.5}	0.05	0.22
HTR3	Heater 3 (118 MMBtu/hr)	NO _x	1.18	5.17
		CO	4.37	19.12
		VOC	0.64	2.79
		SO ₂	0.07	0.30
		PM	0.06	0.26
		PM ₁₀	0.06	0.26
		PM _{2.5}	0.05	0.22
General Sources (8)				
FUG-1	Process Building Fugitives	VOC	9.60	10.22
		HNO ₃	0.12	0.51
FUG-2	HazMat Building Fugitives	HNO ₃	0.16	< 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

Emission Sources - Maximum Allowable Emission Rates

NO _x	- total oxides of nitrogen
SO ₂	- sulfur dioxide
PM	- total particulate matter, suspended in the atmosphere, including PM ₁₀ and PM _{2.5} , as represented
PM ₁₀	- total particulate matter equal to or less than 10 microns in diameter, including PM _{2.5} , as represented
PM _{2.5}	- particulate matter equal to or less than 2.5 microns in diameter
CO	- carbon monoxide
HNO ₃	- nitric acid

- (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) Phase I operations are authorized until January 1, 2024. HTR1 is authorized to operate at a burner rating of 0.025 lb NO_x/MMBtu and 100 ppm CO beginning upon permit issuance and ending on November 1, 2023 (estimated 7 months of maximum firing May 1, 2023 – December 1, 2023). Heater 1 shall not operate December 1, 2023 to January 1, 2024. HTR2 shall meet 0.01 lb NO_x/MMBtu (9 ppm NO_x) and 50 ppm CO beginning July 1, 2023 (5 months). HTR3 shall meet 0.01 lb NO_x/MMBtu (9 ppm NO_x) and 50 ppm CO beginning November 1, 2023 (2 months).
- (7) Phase II operations are authorized after HTR1 is retrofitted and returned to operation January 1, 2024 and are ongoing 12-month rolling enforceable limits for HTR1 – 3 and all heaters shall meet 0.01 lb NO_x/MMBtu (9 ppm NO_x) and 50 ppm CO.
- (8) Production Lines 1 – 12 and all supporting and general production sources authorized at full rate and capacity upon permit issuance.

Date: May 11, 2023