

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 2798

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. 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*	
			lb/hr	TPY

Case 1: Firing process gas from the butadiene section of the No. 2 Olefins Unit, combined tail gas, and pipeline-quality natural gas.

DDB901A	No. 2 Olefins Unit Steam Boiler (388 MMBtu/hr)	NO _x	77.7
		CO	14.4
		SO ₂	7.1
		PM	3.8
		PM (from SCR)**	0.7
		VOC	2.7
		NH ₃ (from SCR)**	1.8
DDB901B	No. 2 Olefins Unit Steam Boiler (388 MMBtu/hr)	NO _x	77.7
		CO	14.4
		SO ₂	7.1
		PM	3.8
		PM (from SCR)**	0.7
		VOC	2.7
		NH ₃ (from SCR)**	1.8

Case 2: Co-firing fuel oil produced at the on-site No. 2 Olefins Unit and process gas from the butadiene section of the No. 2 Olefins Unit, combined tail gas, and pipeline-quality natural gas.

DDB901A	No. 2 Olefins Unit Steam Boiler (388 MMBtu/hr)	NO _x	88.9
		CO	21.8
		SO ₂	107.4
		PM	12.4
		PM (from SCR)**	11.1
		VOC	2.6

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates*</u>	
			lb/hr	TPY
		NH ₃ (from SCR)**	1.8	
DDB901B	No. 2 Olefins Unit Steam Boiler (388 MMBtu/hr)	NO _x	88.9	
		CO	21.8	
		SO ₂	124.3	
		PM	11.5	
		PM (from SCR)**	22.4	
		VOC	1.2	
		NH ₃ (from SCR)**	1.8	

Annual Emissions

DDB901A	No. 2 Olefins Unit Steam Boiler (388 MMBtu/hr)	NO _x	357.9	
		CO	89.8	
		SO ₂	159.3	
		PM	52.8	
		PM (from SCR)**	16.4	
		VOC	10.9	
		NH ₃ (from SCR)**	7.0	
DDB901B	No. 2 Olefins Unit Steam Boiler (388 MMBtu/hr)	NO _x	357.9	
		CO	89.8	
		SO ₂	159.3	
		PM	52.8	
		PM (from SCR)**	16.4	
		VOC	10.9	
		NH ₃ (from SCR)**	7.0	

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- (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) PM - particulate matter
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
NO_x - total oxides of nitrogen
SO₂ - sulfur dioxide
CO - carbon monoxide
NH₃ - ammonia
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.

* Emission rates are based on and the facilities are limited by the following maximum operating schedule:

Hrs/day ____ Days/week ____ Weeks/year ____ or Hrs/year 8,760

** Additional emissions during SCR operation. These emission rates are for representational purposes only. The emission rates of PM and NH₃ reflect emission rates authorized under Standard Permit Number 55980.

Dated _____