

FORM AIR 10 NO_x annual review

Permit Number: EPR/YP3930EX

Operator: Valero Energy Ltd

Installation Location: Pembroke Refinery, Pembroke, SA71 5SJ

Reporting Year: 2021

Parameter: Oxides of Nitrogen

A NO_x emission factor for each combustion plant will be calculated based upon the monitored emission concentrations. For a monitoring result to be used, it is necessary for the fuel type(s) and firing rate(s) during the emission monitoring period to be known. The flue gas flow rate must be measured. Where more than one set of suitable data is available, the average NO_x factor will be used.

The NO_x factor will be quoted as kilogrammes NO_x released per tonne of fuel burned.

Emission Point	Combustion Plant	Monitored Emission Level of NO _x (mg/Nm ³)	NO _x Mass Emission Rate (kg/hour)	Fuel type & firing rate (tonne/hour)	NO _x factor (ToFE)*
A6	04-H-101	205	9.87	3.85 ToFE	2.21
	04-H-102				
	16-H-101				
	16-H-201				
A11	3-F-1	153	7.12	3.72 ToFE	2.11
	3-F-1A				
	3-F-2A				
	4-F-1A				
	4-F-1B				
	4-F-2A				
A12	7-H-301	140	10.56	6.05 ToFE	1.72
	7-H-302				
	7-H-303				
	7-H-304				
A13	12-H-201	168	1.70	0.83 ToFE	1.87
	12-H-202				
A19	05-H-501	148	4.00	2.19 ToFE	1.68

* NO_x factors are provided in units of kg NO_x per ToFE (Tonne of fuel oil equivalent). For non-CEMS emission points Predictive Emissions Monitoring is utilised as per Job Aid PP-HES-JBA-0051.

Signed : RD Livock

Name : Richard Livock

On behalf of the Operator Valero Energy Ltd.

Date : 06/01/2022