FORM AIR 10 NO_x annual review

Permit Number: EPR/YP3930EX

Operator: Valero Energy Ltd

Installation Location: Pembroke Refinery, Pembroke, SA71 5SJ

Reporting Year: 2022

Parameter: Oxides of Nitrogen

A NOx 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 NOx 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 NOx (mg/Nm^3)	NOx Mass Emission Rate (kg/hour)	Fuel type & firing rate (tonne/hour)	NOx factor (ToFE)*
A6	**04-H-101**	215	10.18	3.89 ToFE	2.64
	04-H-102				
	16-H-101				
	16-H-201				
A11	**3-F-1**	226	9.72	3.48 ToFE	2.53
	3-F-1A				
	3-F-2A				
	4-F-1A				
	4-F-1B				
	4-F-2A				
A12	**7-H-301**	178	15.23	6.82 ToFE	2.01
	7-H-302				
	7-H-303				
	7-H-304				
A13	**12-H-201**	199	2.49	1.02 ToFE	2.26
	12-H-202				
A19	**05-H-501**	189	6.33	2.76 ToFE	2.13

* NOx factors are provided in units of kg NOx 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 : *SLGregory* Name : Sabrina Gregory

On behalf of the Operator Valero Energy Ltd.

Date : 14/12/2022