FORM AIR 1: Periodic monitoring of Large Combustion Plant

Permit Number : YP3930EX

Operator : Valero Energy Ltd

Installation Location : Pembroke Refinery, Pembroke, SA71 5SJ

Parameters: sulphur dioxide, oxides of nitrogen, dust (particulate matter) and carbon monoxide - (by discontinuous measurement)
(For use for 50 to >100 MW(th) LCP and for parallel test reporting for LPC of 100 or more MW(th))

Discontinuous Monitoring for Sulphur Dioxide - H2

Reference point	Date & Time of sampling	Flue gas flow rate (Nm^3/hour)	Fuel or fuels used during sampling period, [include S content(s), mass flow rate(s)]	Measured concentration (mg/Nm^3)	Sampling method used (refer to standards)	CEMS result (where continuous monitor is in use) over sampling period (hourly mean)
A6	06/10/22 10:07 - 11:07	94026	Fuel Gas. Flow = 4.3 te/hr, H2S = 0.5 ppm	1,876	Infra Red	
A12	05/10/22 14:13 - 15:13	74021	Fuel Gas. Flow = 7.76 te/hr, H2S = 2 ppm	5	Infra Red	

Discontinuous Monitoring for Oxides of Nitrogen - H2

Reference point	Date & Time of sampling	Flue gas flow rate (Nm^3/hour)	Fuel or fuels used during sampling period, [include mass flow rate(s)]	Measured concentration (mg/Nm^3)	Sampling method used (refer to standards)	CEMS result (where continuous monitor is in use) over sampling period (hourly mean)
A6	06/10/22 10:07 - 11:07	94026	Fuel Gas. Flow = 4.3 te/hr, H2S = 0.5 ppm	175	BS EN 14792	
A12	05/10/22 14:13 - 15:13	74021	Fuel Gas. Flow = 7.76 te/hr, H2S = 2 ppm	188	BS EN 14792	

Discontinuous Monitoring for Particulate (Dust) - H2

Reference point	Date & Time of sampling	Flue gas flow rate (Nm^3/hour)	Fuel or fuels used during sampling period, [include mass flow rate(s)]	Measured concentration (mg/Nm^3)	Sampling method used (refer to standards)	CEMS result (where continuous monitor is in use) over sampling period (hourly mean)
A6	06/10/22 10:07 - 11:07	94026	Fuel Gas. Flow = 4.3 te/hr, H2S = 0.5 ppm	0.6	BS EN 13284-1	
A12	05/10/22 14:12 - 15:18	74021	Fuel Gas. Flow = 7.76 te/hr, H2S = 2 ppm	0.6	BS EN 13284-1	

Discontinuous Monitoring for Carbon Monoxide - H2

Reference point	Date & Time of sampling	Flue gas flow rate (Nm^3/hour)	Fuel or fuels used during sampling period, [include mass flow rate(s)]	Measured concentration (mg/Nm^3)	Sampling method used (refer to standards)	CEMS result (where continuous monitor is in use) over sampling period (hourly mean)
A6	06/10/22 10:07 - 11:07	94026	Fuel Gas. Flow = 4.3 te/hr, H2S = 0.5 ppm	94	BS EN 15058	
A12	05/10/22 14:13 - 15:13	74021	Fuel Gas. Flow = 7.76 te/hr, H2S = 2 ppm	3	BS EN 15058	

Signed : SLGregory

Name : Sabrina Gregory

On behalf of the Operator Valero Energy Ltd

Date : 20/01/2023