

From: Richard Clarke [mailto:Richard.Clarke@INFINIS.COM]
Sent: 21 May 2015 14:47
To: Ward, Tyrone
Cc: Parr, Elizabeth; Permit-Compliance
Subject: Silent Valley 2015 emissions report Permit: ZP3535SQ

Thank you Ty.

I can confirm that 'A1' is the 560 kWe Storm engine. I will make this clear in future reports.

Regards,

Richard.

From: Ward, Tyrone [mailto:Tyrone.Ward@cyfoethnaturiolcymru.gov.uk]
Sent: 20 May 2015 17:42
To: Richard Clarke
Cc: Parr, Elizabeth
Subject: RE: silent valley 2015 emissions report Permit: ZP3535SQ

Afternoon Richard,

We have received the latest engine results on 19th May and agree with the findings of the report (notes 5 and 6.) Please can you confirm that the smaller engine is a Storm 560Kwe?

The report will be placed on file in due course.

Regards Ty

19 MAY 2015

Site: Silent Valley

Permit: ZP3535SQ

Reporting period: 1st January 2015 - 1st January 2016

Test date: 21st April + 8th May 2015

Engine Emission Data

Species	Method description	Measurement uncertainty (+ or - %)	Average measured emission concentration (mg/Nm3)	LFTGN08 overall uncertainty (+ or - %)	Maximum emission including uncertainty (mg/Nm3)	Minimum emission including uncertainty (mg/Nm3)	Permit emission standard (mg/Nm3)
Engine A1 (J316)	NOx	4.3	235	30	306	165	500
	CO	2.6	798	20	958	638	1,400
	TVOC	3.4	1,061	40	1485	637	1,000
Species	Method description	Measurement uncertainty (+ or - %)	Average measured emission concentration (mg/Nm3)	LFTGN08 overall uncertainty (+ or - %)	Maximum emission including uncertainty (mg/Nm3)	Minimum emission including uncertainty (mg/Nm3)	Permit emission standard (mg/Nm3)
Engine A2 (J320)	NOx	2.9	583	30	758	408	650
	CO	2.6	1,172	20	1406	938	1,500
	TVOC	5.3	322	40	451	193	1,750

Note 1 All data is expressed as mg/Nm3 at 273K, 101.3kPa, dry gas, corrected to an oxygen content of 5%. Average measured emissions concentration is calculated from data collected over a one hour period.

Note 2 The monitoring and reporting were carried out by ESG, an MCERTS accredited contractor. ESG staff attending 21st April: J Ward Team Leader Level 2 with TE1, TE2, TE3 and TE4, O Redfern Trainee. 8th May: S Huntley Team Leader Level 2 with TE1, TE2, TE3 and TE4, O Redfern Trainee.

Note 3 Measurement uncertainty is shown. Overall site uncertainty could not be deduced from available data - maximum uncertainty values set out in LFTGN08 have therefore been applied.

Note 4 Engine A2 was tested 21st April. Engine A1 was not available 21st April - it was tested 8th May.

Note 5 Exhaust emissions from engine A1 remained within the overall uncertainty limit for TVOC and met the standard for NOx and CO. Exhaust emissions from engine A1 approach to the limit and are therefore deemed compliant.

Note 6 Exhaust emissions from engine A2 were compliant with the standard.