Releases to Air - PPC Continuous Measurement

Operational Summary for the period 01/01/2020 to 31/12/2020

Operator: National Grid Gas PLC **Site Location: Felindre Compressor Station**

Permit/Variation no: RP3232LD **Release Point: A1**

Continuous Measurement Form						
Pollutant	**Month**	**Daily Avg ELV (mg/m^3)**	**Daily Mean [1][2] (mg/m^3)**	**Hourly 95th Percentile ELV (mg/m^3)**	**Cumulative 95th Percentile Hourly Avg Value [2] (mg/m^3)**	**Total Mass Release (kg)**
Quarter 1						
NOX	Jan	75	21.50	150	22.36	437.51
CO		100	1.46	100	1.46	67.03
NOX	Feb	75	12.28	150	20.58	143.29
CO		100	1.42	100	1.46	26.04
NOX	Mar	75	23.69	150	21.26	227.50
CO		100	1.43	100	1.45	31.72
Quarter 2						
NOX	Apr	75	17.02	150	19.37	853.76
CO		100	1.47	100	1.46	97.18
NOX	May	75	20.73	150	20.21	389.61
CO		100	1.46	100	1.46	41.30
NOX	Jun	75	18.05	150	20.16	48.96
CO		100	1.40	100	1.46	5.75
Quarter 3						
NOX	Jul	75	-	150	20.16	0.00
CO		100	-	100	1.46	0.00
NOX	Aug	75	10.92	150	20.16	2.74
CO		100	1.32	100	1.46	4.34
NOX	Sep	75	-	150	20.16	0.00
CO		100	-	100	1.46	0.00
Quarter 4						
NOX	Oct	75	-	150	20.16	0.00
CO		100	-	100	1.46	0.00
NOX	Nov	75	-	150	20.16	0.00
CO		100	-	100	1.46	0.00
NOX	Dec	75	11.48	150	20.15	7.37
CO		100	7.78	100	1.46	5.07

Signed on behalf of the Operator: **M Secomb** **Date:** 08 January 2021

[1] The result given is the maximum value obtained during the reporting period expressed in the same terms as the emission limit value.

[2] Concentrations are reported with the uncertanties at 95% confidence level of 10% for CO and 20% for Nox subtracted from the continuous prediction.

Form: Air 2

Releases to Air - PPC Continuous Measurement

Operational Summary for the period 01/01/2020 to 31/12/2020

Operator: National Grid Gas PLC **Site Location: Felindre Compressor Station**

Permit/Variation no: RP3232LD **Release Point: A2**

Continuous Measurement Form						
Pollutant	**Month**	**Daily Avg ELV (mg/m^3)**	**Daily Mean [1][2] (mg/m^3)**	**Hourly 95th Percentile ELV (mg/m^3)**	**Cumulative 95th Percentile Hourly Avg Value [2] (mg/m^3)**	**Total Mass Release (kg)**
Quarter 1						
NOX	Jan	75	20.62	150	20.52	356.69
CO		100	3.43	100	3.42	79.18
NOX	Feb	75	19.65	150	20.51	106.85
CO		100	2.93	100	3.42	15.36
NOX	Mar	75	19.55	150	20.47	133.54
CO		100	2.82	100	3.41	20.34
Quarter 2						
NOX	Apr	75	21.34	150	21.10	826.60
CO		100	3.66	100	3.60	122.02
NOX	May	75	21.11	150	21.11	184.26
CO		100	3.62	100	3.61	29.13
NOX	Jun	75	-	150	21.11	0.00
CO		100	-	100	3.61	0.00
Quarter 3						
NOX	Jul	75	-	150	21.11	0.00
CO		100	-	100	3.61	0.00
NOX	Aug	75	-	150	21.11	0.00
CO		100	-	100	3.61	0.00
NOX	Sep	75	-	150	21.11	0.67
CO		100	-	100	3.61	0.71
Quarter 4						
NOX	Oct	75	-	150	21.11	0.00
CO		100	-	100	3.61	0.00
NOX	Nov	75	20.46	150	21.11	5.43
CO		100	3.43	100	3.61	1.18
NOX	Dec	75	22.93	150	21.12	32.64
CO		100	3.08	100	3.61	12.43

Signed on behalf of the Operator: **M Secomb** **Date:** 08 January 2021

[1] The result given is the maximum value obtained during the reporting period expressed in the same terms as the emission limit value.

[2] Concentrations are reported with the uncertanties at 95% confidence level of 10% for CO and 20% for Nox subtracted from the continuous prediction.

Form: Air 2

Releases to Air

Energy Usage Summary for the period 01/01/2020 to 31/12/2020

Operator: National Grid Gas PLC **Site Location: Felindre Compressor Station**

Permit/Variation no: RP3232LD

Release Point	A2	A3	All Release Points in Total
Parameter	**Natural Gas**	**Natural Gas**	**Natural Gas**
Fuel NCV (MJ/t)	49070.24	49091.75	49081.00
Annual fuel usage (t)	3292.88	1581.81	4874.68
Annual energy input (MJ)	161582242.90	77653602.78	239235845.68

Signed on behalf of the Operator: M Secomb **Date:** 08 January 2021

Reporting of other performance indicators for the period 01/01/2020 to 31/12/2020

Operator: National Grid Gas PLC **Site Location: Felindre Compressor Station**

Permit/Variation no: RP3232LD

Period	Turbine Unit	Hours of Operation	Hours of Operation at less than 70% MCR	Mass of NOx per Hour of Operation (t/h)	Mass of CO per Hour of Operation (t/h)
Quarter 1	B	481.09	24.26	0.0017	0.0003
	C	225.20	22.44	0.0027	0.0005
Quarter 2	B	765.77	28.73	0.0017	0.0002
	C	381.98	21.81	0.0026	0.0004
Quarter 3	B	2.20	1.76	0.0012	0.0020
	C	0.44	0.44	0.0015	0.0016
Quarter 4	B	5.37	2.22	0.0014	0.0009
	C	15.20	4.84	0.0025	0.0009
Annual	B	1254.42	56.96	0.0017	0.0002
	C	622.81	49.53	0.0026	0.0005

Operator's Comments:

Signed on behalf of the Operator: M Secomb **Date:** 08 January 2021

Reporting of emissions to water (other than to sewer) for the period 01/01/2020 to 31/12/2020

Operator: National Grid Gas PLC **Site Location: Felindre Compressor Station**

Permit/Variation no: RP3232LD

Period	Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result [1]	Test Method [2]	Sample Date and Times [3][5]	Uncertainty [4]
Biannual 1	W1	visible oil and grease	No visible oil and grease	Any sample	No contamination	Visual check	N/A	N/A
Biannual 2	W1	visible oil and grease	No visible oil and grease	Any sample	No contamination	Visual check	N/A	N/A

Signed on behalf of the Operator: M Secomb **Date:** 08 January 2021

[1] The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum - maximum' measured values.

[2] Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, e.g. gas chromatography.

[3] For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.

[4] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated

[5] A visual check is carried out daily during the site walk round (Monday-Friday). A sample date and time is only recorded for a positive result.

Reporting of Water Usage for the period 01/01/2020 to 31/12/2020

Operator: National Grid Gas PLC **Site Location: Felindre Compressor Station**

Permit/Variation no: RP3232LD

Water Source	Usage (m^3/year)	Specific Usage (m^3/unit output)
Mains water	0	0
Total Water Usage	0	0

Operator's Comments:

Signed on behalf of the Operator: M Secomb **Date:** 08 January 2021

Releases to Air - Continuous Measurement Systems Invalidation Log

Operational Summary for the period 01/01/2020 to 31/12/2020

Operator: National Grid Gas PLC **Site Location: Felindre Compressor Station**

Permit/Variation no: RP3232LD

Emissions to Air - Invalidation Log			
Date	**Period of Invalidation (hours)**	**Cumulative Invalidated Days in Year**	**Comments**

Signed on behalf of the Operator: M Secomb **Date:** 08 January 2021