

Permit Number: EPR/AP3136UA

Operator: Dragon LNG Limited

Facility: Dragon LNG, Waterson, Milford Haven, Pembrokeshire, SA73 1DR

Form Number: Air 31/12/2023

Reporting of periodic measurement of emissions to air from 01/10/2022 to 31/12/2022

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result [1]	Test Method [2]	Sample Date and Times [3]	Uncertainty [4]
A8	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	86 mg/m ³ [6]	Quarterly spot samples	47.6 mg/m ³	EN 14792	26/10/2022 12:09-13:09	+/-3.3
A9	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	86 mg/m ³ [6]	Quarterly spot samples	69.7 mg/m ³	EN 14792	26/10/2022 13:53-15:53	+/-3.8
A10	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	86 mg/m ³ [6]	Quarterly spot samples	62.2 mg/m ³	EN 14792	26/10/2022 15:19-16:19	+/-3.5
A11	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	86 mg/m ³ [6]	Quarterly spot samples	60 mg/m ³	EN 14792	27/10/2022 09:38-10:38	+/-3.8
A12	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	86 mg/m ³ [6]	Quarterly spot samples	51.6 mg/m ³	EN 14792	27/10/2022 11:10-12:10	+/-3.4
A13	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	86 mg/m ³ [6]	Quarterly spot samples	65.3 mg/m ³	EN 14792	27/10/2022 12:45-13:45	+/-3.8
A8	Carbon monoxide	130 mg/m ³ [6]	Quarterly spot samples	28.8 mg/m ³	EN 15058	26/10/2022 12:09-13:09	+/-1.4
A9	Carbon monoxide	130 mg/m ³ [6]	Quarterly spot samples	15 mg/m ³	EN 15058	26/10/2022 13:53-15:53	+/-0.97
A10	Carbon monoxide	130 mg/m ³ [6]	Quarterly spot samples	46.5 mg/m ³	EN 15058	26/10/2022 15:19-16:19	+/-2
A11	Carbon monoxide	130 mg/m ³ [6]	Quarterly spot samples	10.3 mg/m ³	EN 15058	27/10/2022 09:38-10:38	+/-0.88

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result [1]	Test Method [2]	Sample Date and Times [3]	Uncertainty [4]
A12	Carbon monoxide	130 mg/m ³ [6]	Quarterly spot samples	5.6 mg/m ³	EN 15058	27/10/2022 11:10-12:10	+/-0.77
A13	Carbon monoxide	130 mg/m ³ [6]	Quarterly spot samples	5.5 mg/m ³	EN 15058	27/10/2022 12:45-13:45	+/-0.76
A8	Load (tonnes per hour)	Average hourly throughput of up to 169 tonnes per hour.[9]	Value during quarterly spot sampling	150 T/hr	-	26/10/2022 12:09-13:09	-
A9	Load (tonnes per hour)	Average hourly throughput of up to 169 tonnes per hour.[9]	Value during quarterly spot sampling	150 T/hr	-	26/10/2022 13:53-15:53	-
A10	Load (tonnes per hour)	Average hourly throughput of up to 169 tonnes per hour.[9]	Value during quarterly spot sampling	150 T/hr	-	26/10/2022 15:19-16:19	-
A11	Load (tonnes per hour)	Average hourly throughput of up to 169 tonnes per hour.[9]	Value during quarterly spot sampling	150 T/hr	-	27/10/2022 09:38-10:38	-
A12	Load (tonnes per hour)	Average hourly throughput of up to 169 tonnes per hour.[9]	Value during quarterly spot sampling	150 T/hr	-	27/10/2022 11:10-12:10	-
A13	Load (tonnes per hour)	Average hourly throughput of up to 169 tonnes per hour.[9]	Value during quarterly spot sampling	150 T/hr	-	27/10/2022 12:45-13:45	-

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result [1]	Test Method [2]	Sample Date and Times [3]	Uncertainty [4]
A8	Fuel	N/A	Fuel used during emissions sampling	Natural Gas	-	-	Process medium
A9	Fuel	N/A	Fuel used during emissions sampling	Natural Gas	-	-	Process medium
A10	Fuel	N/A	Fuel used during emissions sampling	Natural Gas	-	-	Process medium
A11	Fuel	N/A	Fuel used during emissions sampling	Natural Gas	-	-	Process medium
A12	Fuel	N/A	Fuel used during emissions sampling	Natural Gas	-	-	Process medium
A13	Fuel	N/A	Fuel used during emissions sampling	Natural Gas	-	-	Process medium

[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 Natural Resources Wales is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example 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] Reference conditions for mg/m³ are 15% O₂ CCGT, 6% O₂ solid fuels, 3% O₂ for oil and gas, dry, 0°C, 101.325 kPa

[6] The site is permitted to operate either: a maximum of 6 SCVs at an hourly average throughput of up to 150 tonnes per hour; or a maximum of 5 SCVs at an average hourly throughput of up to 169 tonnes per hour.

SignedPriscilla Wilson..... Date.....31/12/2022.....
(Authorised to sign as representative of Operator)

Permit Number: EPR/AP3136UA

Operator: Dragon LNG Limited

Facility: Dragon LNG, Waterson, Milford Haven, Pembrokeshire, SA73 1DR

Form Number: Air2/ 31/12/2023

Emission Point: A8

Reporting of continuously monitored emissions to air for the period from 01/10/2022 to 31/12/2022

Month	Monthly Mean of oxides of nitrogen (NO and NO ₂ expressed as NO ₂) (mg/m ³)	Monthly mean of carbon monoxide
Quarter 1		
January	Submitted Q1	Submitted Q1
February	Submitted Q1	Submitted Q1
March	Submitted Q1	Submitted Q1
Quarter 2		
April	6.79	19.27
May	0.04	0.58
June	0	0
Quarter 3		
July	0.00	6.97
August	10.08	43.41
September	10.39	68.68
Quarter 4		
October	0.36	12.94
November	6.61	27.62
December	16.93	38.56

[1] All data based on validated hourly average concentrations, excluding start-up and shut-down and periods of malfunction or breakdown of abatement equipment

[2] Reference conditions for mg/m³ are 15% O₂ CCGT, 6% O₂ solid fuels, 3% O₂ for oil and gas, dry, 0°C, 101.325 kPa

Permit Number: EPR/AP3136UA

Operator: Dragon LNG Limited

Facility: Dragon LNG, Waterson, Milford Haven, Pembrokeshire, SA73 1DR Form Number: Water1 / 31/12/2022

Reporting of emissions of effluent for the period from 01/10/2022 to 31/12/2022

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Uncertainty ^[4]
E2(B)	Oil (mg/l)	5 mg/l	Quarterly spot samples	<1 mg/l	BS EN ISO 9377-2 or SCA blue book 77 ISBN0117517283	14/12/2022 09:00 hrs	
E3	Oil (mg/l)	5 mg/l	Monthly spot samples		BS EN ISO 9377-2 or SCA blue book 77 ISBN0117517283		
			Jan/Apr/Jul/Oct	<1 mg/l		19/10/2022 09:00 hrs	
			Feb/May/Aug/Nov	<1 mg/l		16/11/2022 09:00 hrs	
			Mar/Jun/Sep/Dec	<1 mg/l		14/12/2022 09:00 hrs	
E2(B)	Suspended solids (mg/l)	50 mg/l	Quarterly spot samples	11.2 mg/l	BS EN 872 or SCA blue book 105 ISBN 011751957X	14/12/2022 09:00 hrs	
E3	Suspended solids (mg/l)	50 mg/l	Monthly spot samples		BS EN 872 or SCA blue book 105 ISBN 011751957X		
			Jan/Apr/Jul/Oct	<1 mg/l			

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Uncertainty ^[4]
			Feb/May/Aug/Nov	<1.36 mg/l		16/11/2022 09:00 hrs	
			Mar/Jun/Sep/Dec	<1 mg/l		14/12/2022 09:00 hrs	
E2(B)	pH	6 – 9	Quarterly spot samples	7.9 pH	BS ISO 10523 or SCA blue book 14 ISBN 0117514284	14/12/2022 09:00 hrs	
E3	pH	6 – 9	Monthly spot samples		BS ISO 10523 or SCA blue book 14 ISBN 0117514284		
			Jan/Apr/Jul/Oct	7.7 pH		19/10/2022 09:00 hrs	
			Feb/May/Aug/Nov	7.8 pH		16/11/2022 09:00 hrs	
			Mar/Jun/Sep/Dec	8.1 pH		14/12/2022 09:00 hrs	
E3	Total oxidised nitrogen asN (mg/l) ^[6]	45 mg/l	Monthly averages on-line analyser	5.67	BS EN ISO 13395 or BS EN 11905-1 or BS EN 12260 or BS ISO 29441 or SCA blue book 40 ISBN 0117515930	Average for the quarter	
E3	Flow (m3/day)	-	Total volume		Continuous monitor		
			Jan/Apr/Jul/Oct	1.90		Total for the month	
			Feb/May/Aug/Nov	1013.65		Total for the month	
			Mar/Jun/Sep/Dec	2799.78		Total for the month	

- [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 Natural Resources Wales is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example 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] TON calculated from online continuous analyser that measures Nitrates & Nitrites concentrations (mg/l as N) directly and reports average values for the month.

SignedPriscilla Wilson..... Date.....31/12/2022.....
(Authorised to sign as representative of Operator)

Permit Number: EPR/AP3136UA

Operator: Dragon LNG Limited

Facility: Dragon LNG, Waterson, Milford Haven, Pembrokeshire, SA73 1DR Form Number: Energy1 / 31/12/2022

Reporting of Energy Usage for the year 2022

Energy Source	Energy Usage		+Specific Usage (MWh/GWh output)
	Quantity	Primary Energy (MWh)	
Electricity *	MWh	330717.8	6.4
Natural Gas	MWh	654627.6	12.6
Gas Oil	tonnes	20.6	
Other	specify		
TOTAL	-		

* Conversion factor for delivered electricity to primary energy = 2.4

Operator's comments: +Gas exported to the grid for 2022 was 51844.0 GWh – Terminal output

*We have multiplied the total electricity use for the year by 2.4 to get the figure above.

SignedPriscilla Wilson.....

Date.....31/12/2022.....

Permit Number: EPR/AP3136UA

Operator: Dragon LNG Limited

Facility: Dragon LNG, Waterson, Milford Haven, Pembrokeshire, SA73 1DR

Form Number: Performance1 / 31/12/2022

Reporting of other performance indicators for the period 01/10/2022 to 31/12/2022

Parameter	Quantity (GWh)
Natural gas	178.2

Operator's comments : Fuel Gas used in the Submerged Combustion Vapourisers

SignedPriscilla Wilson..... Date.....31/12/2022.....
(Authorised to sign as representative of Operator)