Permit Number: **EPR/AB3233DW** **Operator:** **GP Biotec Ltd**

Facility: Great Porthamel Farm AD Plant Form Number: Air 1 / 28/01/22

Reporting of emissions to air for the year 2021

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result [1]	Test Method [2]	Sample Date and Times [3]	Uncertainty [4]
A1 CHP Exhaust	Oxides of Nitrogen (NO and NO2 expressed as NO2)	500mg/m^3	Hourly mean	478	BS EN 14792	21/01/2021 11:38 – 12:38	20.8
	Carbon Monoxide	1400mg/m^3	Hourly mean	848	BS EN 15058	21/01/2021 11:38 – 12:38	35.5
	Sulphur Dioxide	350mg/m^3	Hourly mean	0.81	BS EN 14791	21/01/2021 11:38 – 12:38	0.066
	Total VOC's (including methane)	1000mg/m^3	Hourly mean	1401	BS EN 12619	21/01/2021 11:38 – 12:38	59.7
A2 CHP Exhaust	Oxides of Nitrogen (NO and NO2 expressed as NO2)	500mg/m^3	Hourly mean	588	BS EN 14792	21/01/2021 15:40 – 16:40	25.4
	Carbon Monoxide	1400mg/m^3	Hourly mean	577	BS EN 15058	21/01/2021 15:40 – 16:40	24.3
	Sulphur Dioxide	350mg/m^3	Hourly mean	3.3	BS EN 14791	21/01/2021 15:40 – 16:40	0.26
	Total VOC's (including methane)	1000mg/m^3	Hourly mean	435	BS EN 12619	21/01/2021 15:40 – 16:40	18.7
A3 Emergency Flare Stack Note5	Oxides of Nitrogen (NO and NO2 expressed as NO2)	150mg/m^3	Hourly mean	N/A	BS EN 14792	N/A	N/A
	Total Volatile Organic Compounds (VOCs)	10mg/m^3	Hourly mean	N/A	BS EN 12619	N/A	N/A
	Carbon Monoxide	50mg/m^3	Hourly mean	N/A	BS EN 15058	N/A	N/A

[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] Monitoring of flare emissions is only necessary when the flare operated in excess of 10% of the time

Signed …… ……. Date….28.01.2022…….

(Authorised to sign as representative of Operator)

Permit Number: **EPR/AB3233DW** **Operator:** **GP Biotec Ltd**

Facility: Great Porthamel Farm AD Plant Form Number: Water 1 / 15/01/22

Reporting of emissions to water (other than to sewer) and land for the year 2021

Parameter	Units	Result
Batches of water tested for discharge criteria (ammonia, pH, and/or visual check)	number	**0**
Batches of water passed all tests and discharged to surface water	number	**0**
Batches of water failed one or more test not released to surface water	number	**0**

Signed ……. **Date…28.01.2022….**

(Authorised to sign as representative of Operator)

Permit Number: **EPR/AB3233DW** **Operator:** **GP Biotec Ltd**

Facility: Great Porthamel Farm AD Plant Form Number: Performance1 15/01/22

Reporting of other performance indicators for the year 2021

Parameter		**Units**	**Result**
Waste treated (total)		tonnes	**69,885.57**
Animal waste treated		tonnes	**53,769.7**
Biogas produced by AD facility		M^3	**3,801,600**
Power output – Electricity generated		MWh	**8640.0**
Energy efficiency		MWh/m^3 biogas	**73.50%**
Electrical energy exported to the grid		MWh	**7079.0**
Electrical energy drawn from the grid		MWh	**1.16**
Water usage (mains water and any other sources, specify separately)		m^3	**52.47**
Operational time of emergency flare		% of operational time	**2.54%**
Amount of biogas combusted in the CHP unit per day		m^3/day	**10, 924.38**

Operator's comments:
Site has continued to perform well throughout 2021.
Water collected in W1 was sucked out and recirculated through the AD process, used as liquid input.

Signed ……. **Date…… 28.01.2022**
(Authorised to sign as representative of Operator)