

Permit Number: AB3191FR

Operator: Severn Trent Green Power (Bridgend) Limited

Facility: Parc Stormy AD Facility

Form Number: Air1 / 17/08/2022

Reporting of emissions to air for the period from 01/01/2022 to 31/12/2022 effective from 17 August 2022

Emission Point	Substance / Parameter	Emission		Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Uncertainty ^[4]
		Limit Value	Reference Period				
A1	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	500 mg/m ³	Hourly mean	481	BS EN 14792	12/10/2022 10:00 – 11:00	+/-19
A1	Sulphur Dioxide	350 mg/m ³	Hourly mean	43.7	BS EN 14791	12/10/2022 10:00 – 11:00	+/-3.0
A1	Non-methane Volatile Organic Compounds (VOCs)	75mg/m ³	Hourly mean	2.7	BS EN 12619 or 13526 depending on concentration	12/10/2022 10:00 – 11:00	+/-0.6
A1	Volatile Organic Compounds (VOCs)	1000 mg/m ³	Hourly mean	966		12/10/2022 10:00 – 11:00	+/-28
A1	Carbon monoxide	1400 mg/m ³	Hourly mean	1180	BS EN 15058	12/10/2022 10:00 – 11:00	+/-49
A2	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	500 mg/m ³	Hourly mean	492	BS EN 14792	12/10/2022 11:30 – 12:30	+/-20
A2	Sulphur Dioxide	350 mg/m ³	Hourly mean	50.8	BS EN 14791	12/10/2022 11:30 – 12:30	+/-3.4
A2	Non-methane Volatile Organic Compounds (VOCs)	75mg/m ³	Hourly mean	2.3	BS EN 12619 or 13526 depending on concentration	12/10/2022 11:30 – 12:30	+/-0.5

Emission Point	Substance / Parameter	Emission		Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Uncertainty ^[4]
		Limit Value	Reference Period				
A2	Volatile Organic Compounds (VOCs)	1000 mg/m ³	Hourly mean	884		12/10/2022 11:30 – 12:30	+/-27
A2	Carbon monoxide	1400 mg/m ³	Hourly mean	998	BS EN 15058	12/10/2022 11:30 – 12:30	+/-42
A5 Biofilter and Scrubber Unit	Hydrogen Sulphide (H ₂ S)	No limit set	Every 6 months		US EPA Method 11 (Impinger method) or CEN TS 13649 (Charcoal tube), US EPA Method 15	This requirement came into effect on 17/08/2022 monitoring scheduled January 2023 Finding will be reported in 2023 Annual Performance Report	
A5 Biofilter and Scrubber Unit	Ammonia (NH ₃)	20 mg/Nm ³	Every 6 months		BS EN 21877	This requirement came into effect on 17/08/2022 monitoring scheduled January 2023 Finding will be reported in 2023 Annual Performance Report	

[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.

Signed: Shane Fallon
(Authorised to sign as representative of Operator)

Date 31/01/2023

Permit Number: AB3191FR

Operator: Severn Trent Green Power (Bridgend) Limited

Facility: Parc Stormy AD Facility

Form Number: Water 1 / 01/01/2016

Reporting of Water Usage for the year 2022

Water Source	Usage (m ³ /year)	Specific Usage (m ³ /unit output)
Mains water	450.7	
Borehole	4318	
TOTAL WATER USAGE	4768.7	

Operator's comments:

- Mains water usage increased slightly due to Covid restrictions easing and drivers using the welfare facilities again.
- Borehole water similar usage as the previous year, used in the biofilter scrubber, pressure washing delivery vehicles, washing the reception building and general upkeep of site cleanliness

Signed: Shane Fallon
(Authorised to sign as representative of Operator)

Date 31/01/2023

Permit Number: AB3191FR

Operator: Severn Trent Green Power (Bridgend) Limited

Facility: Parc Stormy AD Facility

Form Number: Energy 1 / 03/03/2021

Reporting of Energy Usage for the year 2022

Energy Source	Energy Usage		Specific Usage (MWh/unit output)
	Quantity	Primary Energy (MWh)	
Electricity *	MWh	24.55	
Natural Gas	MWh	n/a	
Gas Oil	tonnes	7.656	
Recovered Fuel Oil	tonnes	n/a	
TOTAL	-		

* Conversion factor for delivered electricity to primary energy = 2.4

Operator's comments:

- Gas oil is used for fuelling the site telehandler, pressure washer.
- Increase in gas oil used due to maintenance tasks carried out on site.

Signed: Shane Fallon
(Authorised to sign as representative of Operator)

Date 31/01/2023

Permit Number: AB3191FR

Operator: Severn Trent Green Power (Bridgend) Limited

Facility: Parc Stormy AD Facility

Form Number: Performance 1 / 17/08/2022

Reporting of other performance indicators for the period 01/01/2022 to 31/12/2022 effective from 17 August 2022

Parameter	Units
Power output - electricity	24,932 MWh
Energy efficiency	431.635 MWh/m ³ biogas
Electrical energy exported to the grid	22,037.401 MWh
Electrical energy drawn from the grid	10.231 MWh
Total raw material used	999.267 tonnes
Operational time of emergency flare	0.003 %
Amount of gas sent to flare	36,660 m ³
Amount of biogas combusted in the CHP unit per day	14,741 m ³ /day
Generation of residues	2,684.62 Tonnes
Generation of wastewater	0 m ³

Operator's comments:

-CHP major services resulted in an increase in power imported from the grid.

Total amount of waste and raw materials 68,518.857 tonnes (999.267 raw materials, 67,519.59 waste)

Reason for more waste processed;

Change in STS processes in their facility that produces the milk whey liquid feedstock has resulted in a less calorific liquid waste been used in the process therefore leading to an increase in solid waste been processed and treated at Stormy to make up the short fall in biogas lost.

Signed: Shane Fallon
(Authorised to sign as representative of Operator)

Date 31/01/2023