

Appendix 1 – Air 1 Reporting Form

Reporting of emissions to air for the period from 01/01/2020 to 31/12/2020

Emission Point	Substance /Parameter	Emission Limit Value	Reference Period	Result [1]	Test Method [2]	Sample Date and Times [3]	Uncertainty [4]
A1	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	500 mg/m ³	Hourly average	485	In accordance with that described in the Agency's Technical Guidance Note M2 "Monitoring of stack emissions to Air"	07/08/2020 10:35-11:35	±21
A1	Sulphur dioxide	350 mg/m ³	Hourly average	350		07/08/2020 10:35-11:35	±47
A1	Carbon monoxide	1400 mg/m ³	Hourly average	982		07/08/2020 10:35-11:35	±1.7
A1	Total VOCs	1000 mg/m ³	Hourly average	961		07/08/2020 10:35-11:35	±35
A2	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	500 mg/m ³	Hourly average	490	In accordance with that described in the Agency's Technical Guidance Note M2 "Monitoring of stack emissions to Air"	07/08/2020 12:05-13:05	±22
A2	Sulphur dioxide	350 mg/m ³	Hourly average	25.3		07/08/2020 12:05-13:05	±1.7
A2	Carbon monoxide	1400 mg/m ³	Hourly average	1124		07/08/2020 12:05-13:05	±50
A2	Total VOCs	1000 mg/m ³	Hourly average	1031		07/08/2020 12:05-13:05	±37

[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 Environment Agency is used, then the appropriate identifier is given.

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

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

Appendix 2 – Water Usage 1 Reporting Form - Water Usage for the year 2020

Permit Number:	EPR/AB3191FR	Operator:	Severn Trent Green Power Group Limited
Facility:	Stormy Down Food Waste Anaerobic Digestion Facility		

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

Water Source	Usage (m ³ /year)	Specific Usage (m ³ /unit output)
Mains water	522.591	
Site borehole	3885	
TOTAL WATER USAGE	4407.591	

Operator's comments:

- Borehole water has been used for biofilter scrubber unit, pressure washing of delivery waste vehicle and reception building floor or general cleaning around site. Significant increase in borehole due to higher temperature over summer period.
- Mains water is main source of water in the welfare cabin which due to COVID has been not used as much by drivers. This caused drop in water mains usage on site.

Appendix 3 – Energy 1 - Energy Usage for the year 2020

Permit Number:	EPR/AB3191FR	Operator:	Severn Trent Green Power Group Limited
Facility:	Stormy Down Food Waste Anaerobic Digestion Facility		

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

Energy Source	Energy Usage		Specific Usage (MWh/unit output)
	Quantity	Primary Energy (MWh) FWAD electricity consumption	
Electricity *	MWh	9.499	
Natural Gas	MWh	N/A	
Gas Oil	tonnes	9.7	
Recovered Fuel Oil	tonnes	N/A	

* Conversion factor for delivered electricity to primary energy = 2.4

Operator's comments:

- High gas oil usage was very high due to lagoon work. Gas oil used only for machinery.
- No CHP maintenance work effected in lower electricity usage in 2020 than in 2019..

Appendix 4 – Performance 1 - Other Performance Indicators for the year 2020

Permit Number:	EPR/AB3191FR	Operator:	Severn Trent Green Power Group Limited
Facility:	Stormy Down Food Waste Anaerobic Digestion Facility		

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

Parameter		Units
Total amount of waste treated (FWAD Feedstock + Maize)	68,662 4,172.358	Waste = Tonnes Maize = Tonnes
Power output - Electricity	25,632.848	MWh
Operational time of the flare	0.62	Hrs
Energy efficiency	375	MWh/m ³ biogas
Electrical energy exported to the grid	23,187.825	MWh
Electrical energy drawn from the grid	3.958	MWh
Amount of biogas combusted in the CHP unit per day	26,345	m ³ /day
Amount of biogas generated	11,147,771	m ³

Operator's comments:

- Increase in waste coming into site due to council contracts and more waste produced by households during lockdowns.
- More power exported to grid and less power drawn to grid as both engines run without maintenance break.
- Lower flare operation time as both engines run without maintenance break.

Signed

(Authorised to sign as representative of Operator

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Date...31/01/2020.....

Annual Performance Report 2020