

Permit Number: AB3096CP

Operator: Welsh Water Organic Energy (Cardiff) Limited

Facility: Lamby Way Open Windrow Composting Facility

Form Number: Air1 / 27/04/2021

**Reporting of emissions to air for the period from 01/01/2022 to 31/12/2022**

Emission Point	Substance / Parameter	Emission		Result <sup>[1]</sup>	Test Method <sup>[2]</sup>	Sample Date and Times <sup>[3]</sup>	Uncertainty <sup>[4]</sup>
		Limit Value	Reference Period				
A1	Hydrogen Sulphide (H <sub>2</sub> S)	No limit	Every 6 months <sup>[5]</sup>	N/A	BS EN 14791		
A1	Ammonia (NH <sub>3</sub> )	20 mg/Nm <sup>3</sup>	Every 6 months <sup>[5]</sup>	N/A	US EPA Method 11 (Impinger method) or CEN TS 13649 (Charcoal tube), US EPA Method 15		
A1	Odour	1000 ouE/Nm <sup>3</sup>	Every 6 months <sup>[5]</sup>	N/A	BS EN 13725		

[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] The monitoring of NH<sub>3</sub> and H<sub>2</sub>S can be used as an alternative to the monitoring of the odour concentration. The monitoring parameters for the biofilter are to be agreed with NRW following completion of pre-operational measure 2.

Signed .....  
 (Authorised to sign as representative of Operator)

Date..... 16/02/2023.....

Permit Number: AB3096CP

Operator:

Welsh Water Organic Energy (Cardiff) Limited

Facility: Lamby Way Open Windrow Composting Facility

Form Number: Sewer1 / 17/08/2022

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

Emission Point	Substance / Parameter	Emission		Reference Period	Result <sup>[1]</sup>	Test Method <sup>[2]</sup>	Sample Date and Times <sup>[3]</sup>	Uncertainty <sup>[4]</sup>
		Limit Value						
S1	To be agreed with NRW upon completion of IC2 <sup>[5]</sup>	To be agreed with NRW upon completion of IC2 <sup>[5]</sup>		To be agreed with NRW upon completion of IC2 <sup>[5]</sup>		To be agreed with NRW upon completion of IC2 <sup>[5]</sup>		

[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] The monitoring of parameters and limits to be set are to be agreed if substances are identified as relevant following completion of the wastewater inventory required by BAT 3 of the Waste Treatment BREF Document (EU 2018), to be provided as part response to IC 2.

Signed .....  
(Authorised to sign as representative of Operator)

Date..... 16/02/2023.....

Permit Number: AB3096CP

Operator:

Welsh Water Organic Energy (Cardiff) Limited

Facility: Lamby Way Open Windrow Composting Facility

Form Number: WaterUsage1 / 24/06/2016

**Reporting of Water Usage for the year 2022**

Water Source	Usage (m <sup>3</sup> /year)	Specific Usage (m <sup>3</sup> /unit output)
Mains water	N/A	
Site borehole	N/A	
River abstraction	N/A	
<b>TOTAL WATER USAGE</b>	N/A	

Operator's comments:

The water is fed from the main Cardiff Council site, there is no dedicated water meter for the site

Signed .....  
(authorised to sign as representative of Operator)

Date.....16/02/2023.....

Permit Number: AB3096CP

Operator: Welsh Water Organic Energy (Cardiff) Limited

Facility: Lamby Way Open Windrow Composting Facility

Form Number: Energy1 / 24/06/2016

### Reporting of Energy Usage for the year 2022

Energy Source	Energy Usage Quantity	Primary Energy (MWh)	Specific Usage (MWh/unit output)
Electricity *	19.58 MWh	46.99 MWh*	n/a one meter supplying all of site. Mainly used for supplying welfare facilities.
Natural Gas	N/A	N/A	N/A
Gas Oil	104.47 tonnes	1,214.99 MWh	Used in mobile plant on site
Recovered Fuel Oil	N/A	N/A	N/A
TOTAL	124.05	1261.98	

\* Conversion factor for delivered electricity to primary energy = 2.4

#### Operator's comments:

Electricity is used to power the office, welfare, outside lighting and the fuel dispenser on site  
There is no gas supply to the site

Gas oil 117,378 litres x 0.00089 = 104.47 tonnes (1 litre of fuel oil is equivalent 0.00089 tonnes)

Conversion factor for Gas Oil tonnes to primary energy = 11.63

Signed .....  
(Authorised to sign as representative of Operator)

Date..... 16/02/2023.....

Permit Number: AB3096CP

Operator:

Welsh Water Organic Energy (Cardiff) Limited

Facility: Lamby Way Open Windrow Composting Facility

Form Number: Performance1 / 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
Total amount of compost produced	13,424.66 tonnes
Total amounts of waste treated	20,807.27 tonnes
Total raw material used	0 tonnes
Generation of residues	429.08 tonnes
Generation of wastewater	4,980m <sup>3</sup>

Operator's comments:

The site had the PAS100 certificate renewed in October 2022  
Residues consist of 87.02 tonnes of reject and 342.06 process reject  
Wastewater generation is all water from the site including rain water.

Signed [REDACTED] .....  
(Authorised to sign as representative of Operator)

Date.....16/02/2023.....