

Notice of request for more information

Environmental Permitting (England and Wales)
Regulations 2016

Notice requiring further information

To: Company Secretary
Biomass UK No. 2 Limited
No. 1 Poultry
London
EC2R 8EJ

Application number: PAN-000869

Natural Resources Wales, in exercise of its powers under paragraph 4 of Part 1 of Schedule 5 of the above Regulations, requires you to provide the information detailed in the attached schedule. The information is required in order to determine your application for a permit, dated 26th October 2016. The information requested should be sent to the following address by 7th February 2017.

This notice has been sent to Mr. Steve Butler.

Information should be sent to:

Victoria Seller
Permitting Service
Natural Resources Wales
Cambria House
29 Newport Road
Cardiff
CF24 0TP

Name	Date
	24 th January 2017

Victoria Seller, Senior Permitting Officer (Regulated Industry)
Authorised on behalf of Natural Resources Wales

Ffôn/Tel 03000 654588
Ebost/Email victoria.seller@cyfoethnaturiolcymru.gov.uk
victoria.seller@naturalresourceswales.gov.uk

Schedule

Air impact assessment and human health risk assessment

In relation to the computer modelling carried out as part of the air impact assessment and human health risk assessment, as referenced in the report 'Proposed Wood Gasification Plant Facility, Woodham Road, Barry: Air Quality Assessment' (the Air Quality report), we note that the locations of on-site buildings included in the modelling software different to the locations as they appear on site plans 'BUK202' and 'BARRY_01_DWG_01_20111'.

Please repeat the modelling exercise using the correct building orientation and re-submit the modelling files to NRW. Please also re-calculate the process contributions at sensitive receptors and re-assess the impact of the PCs in a revised Air Quality report.

Please also answer / address the following questions / queries in a revised Air Quality report:

1. In relation to Section 3.5 on page 9 of the Air Quality report. The emission limit for polycyclic aromatic hydrocarbons (PAHs) listed in Table 3.8 on page 156 of the cited reference is " $< 0.01 \text{ mg/m}^3$ ", not " $< 0.001 \text{ mg/m}^3$ " as shown in the above referenced report. Please amend the predictions shown in Table 20 on page 23 of the Air Quality report;
2. In relation to the AERMET modelling files, surface roughness for water was used several sections, which does not reflect land use within 1 km of the installation. Please revise the AERMET modelling files accordingly to include the correct surface roughness factors within 1km of the installation and re-process the modelling data to produce new PCs;
3. In relation to Table 4 on page 15 of the Air Quality report. Please provide explanation why the Seven Estuary SAC was not included in the impact assessment, as this receptor is within the relevant screening distance of the installation;
4. There are errors in the page numbering from Section 4 of the Air Quality report onwards, which restart at page 1 from page 17. Please amend these errors;
5. In relation to Table 6 on the restarted page 1 of the Air Quality report. NO_2 diffusion tube data for more recent years than is used in the assessment are available now¹. Please amend the assessment carried out in Table 6 to include the most recent diffusion tube data that is available;
6. In relation to Table 33 on page 34 of the Air Quality report. Please confirm that ammonia deposition and hydrogen chloride deposition (wet & dry) has been included in the acidification calculations. Please include this calculation;
7. In relation to Table C2 on page 46 of the Air Quality report. The NO_x emission concentration when the installation is operating in abnormal conditions (specifically, during periods of failure of the urea injection system) is stated to be lower than the short-term emission limit value for

¹ Vale of Glamorgan Council 2016 Air Quality Progress Report. In fulfillment of Part IV of the Environment Act 1995 Local Air Quality Management, August 2016.

- NO₂ given in Annex VI of the Industrial Emissions Directive. Please provide evidence / justification for this statement; and
8. In relation to Table C3 on page 46 of the Air Quality report. The SO₂ emission concentration when the installation is operating in abnormal conditions (specifically, during periods of failure of the lime dosing system) is stated to be lower than the short-term emission limit value for SO₂ given in Annex VI of the Industrial Emissions Directive. Please provide evidence / justification for this statement.

Noise impact assessment

In relation to the noise impact assessment report 'Barry Biomass Energy Plant, Barry. Noise Assessment', please provide a plan that shows the locations of the noises sources referenced in Appendix B.

Computational fluid dynamics modelling

Page 31 of the report 'Biomass UK No. 2 Ltd. Barry Energy Production Facility' states that:

"Detailed Computational-Fluid-Dynamic modelling (CFD) of the gasification/combustion process has been carried out to ensure complete combustion of the fuels under varying conditions, and also ensures the 2 seconds minimum dwell time above 850°C. This information is commercial in confidence and has not been included within the application."

Please provide a summary of the model set up and input parameters and results to demonstrate that the requirements of Article 50(2) of the Industrial Emissions Directive will be met.

Industrial Emissions Directive – Article 22(2) on a baseline report on relevant hazardous substances in soil and / or groundwater

The application report 'Biomass UK No. 2 Ltd. Barry Energy Production Facility' does not indicate whether the installation will use, produce or release relevant hazardous substances to soil and / or groundwater, in line with Article 22(2) of the Industrial Emissions Directive.

Please indicate whether or not the installation will use, produce or release relevant hazardous substances, in line with Article 22(2) of the Industrial Emissions Directive.

END OF SCHEDULE