PEEL ENVIRONMENTAL MANAGEMENT LTD AND BILSTHORPE WASTE LTD

PUBLIC INQUIRY UNDER SECTION 77 OF THE TOWN AND COUNTRY PLANNING ACT 1990 (AS AMENDED) INTO THE PROPOSED DEVELOPMENT OF AN ENERGY FROM WASTE FACILITY ON LAND AT BILSTHORPE BUSINESS PARK, BILSTHORPE, NOTTINGHAMSHIRE

PINS REFERENCE: APP/L3055/V/14/3007886
LPA REFERENCE: ES/2950

ENVIRONMENTAL STATEMENT

THIRD REGULATION 22 SUBMISSION

NON-TECHNCIAL SUMMARY

SEPTEMBER 2015

PEEL ENVIRONMENTAL MANAGEMENT LTD AND BILSTHORPE WASTE LTD

PUBLIC INQUIRY UNDER SECTION 77 OF THE TOWN AND COUNTRY PLANNING ACT 1990 (AS AMENDED) INTO THE PROPOSED DEVELOPMENT OF AN ENERGY FROM WASTE FACILITY ON LAND AT BILSTHORPE BUSINESS PARK, BILSTHORPE, NOTTINGHAMSHIRE

PINS REFERENCE: APP/L3055/V/14/3007886
LPA REFERENCE: ES/2950

ENVIRONMENTAL STATEMENT: THIRD REGULATION 22 SUBMISSION

NON-TECHNCIAL SUMMARY

September 2015

This report is submitted in support of a detailed planning application for the above project. The application has been co-ordinated by AXIS with technical inputs from:

- AXIS – Project Management / Co-ordination, Planning Policy & Need, Traffic & Transportation, Landscape & Visual Effects, Cultural Heritage, Cumulative Effects and Grid Connection;
- UMC ARCHITECTS – Architecture & Design;
- TERRACONSULT – Geology, Hydrogeology and Ground Conditions;
- ARGUS ECOLOGY – Ecology & Nature Conservation;
- FICHTNER – Air Quality and Human Health;
- NVC – Noise
- TIER / WEETWOOD – Surface Water and Flood Risk
- REGENERIS – Socio-Economics
- COTSWOLD ARCHAEOLOGY – Heritage

Chester Office | Well House Barns | Chester Road | Bretton| Chester | CH4 0DH
South Manchester Office | Camellia House | 76 Water Lane | Wilmslow | SK9 5BB
t 0844 8700 007 | **e** enquiries@axisped.co.uk

CONTENTS

FOREWORD

This Environmental Statement (ES) is submitted in support of a detailed planning application made jointly by Peel Environmental Management (UK) Ltd. and Bilsthorpe Waste Ltd. for the development of Bilsthorpe Energy Centre, a combined Materials Recovery Facility and Plasma Gasification Facility, on land at Bilsthorpe Business Park (formerly part of Bilsthorpe Colliery), Eakring Road, Bilsthorpe, Nottinghamshire. The ES comprises the following documents.

- The Environmental Statement (ES) Main Report (Volume 1), which contains the detailed project description; an evaluation of the current environment in the area of the proposed development; the predicted environmental impacts of the scheme; and details of the proposed mitigation measures which would alleviate, compensate for, or remove those impacts identified in the study. Volume 1 also includes a summary of the overall environmental impacts of the proposed development and all relevant schematics, diagrams and illustrative figures;

- Technical Appendices (Volume 2), which include details of the methodology and information used in the assessment, detailed technical schedules and, where appropriate, raw data;

- Non-Technical Summary (Volume 3), containing a brief description of the proposed development and a summary of the ES, expressed in non-technical language;

- An update to the ES by way of a series of Regulation 22 submissions of further and other information, comprising:
    - Regulation 22 submission of further and other information (July 2014);
    - Second Regulation 22 submission of further and other information (August 2014); and
    - Third Regulation 22 submission of further and other information (September 2015).

Paper copies of the third ES Regulation 22 submission are availiable as a single volume, for £25.00. Copies of the original ES documentation, as a three volume set are available at a cost of £250.00. The first and second Regulation 22 submissions, both as

single volumes, are available at a combined cost of £50.00. Alternatively, the ES Non-Technical Summaries (the original ES and ES Regulation 22 submissions) can be purchased for £25.00 per four document set. The entire ES documentation is available on a CD at a cost of £10.00. All requests to purchase any ES documentation should be made in writing to Peel Environmental Management (UK) Ltd, Bilsthorpe Energy Centre, FREEPOST RSKS SBBE LHHZ, c/o PPS Group, Hanover House, 30 – 32 Charlotte Street, Manchester, M1 4FD. An electronic copy of the Non-Technical Summary documents is also available via email bilsthorpe@peel.co.uk, free of charge. In addition, all of the planning application documentation, including the ES can be downloaded from www.peel.co.uk/bilsthorpe.

1.0 INTRODUCTION

1.1 Introduction

1.1.1 In November 2013 Peel Environmental Management (UK) Ltd and Bilsthorpe Waste Ltd (the applicants) submitted a planning application, reference 3/13/01767/CMW, to Nottinghamshire County Council (NCC) for the development of Bilsthorpe Energy Centre (BEC), a combined Materials Recovery Facility and Plasma Gasification Facility, on land at Bilsthorpe Business Park (formerly part of Bilsthorpe Colliery), Eakring Road, Bilsthorpe, Nottinghamshire. The application was accompanied by an Environmental Statement (ES) that describes the proposal and provides an assessment of the likely significant environmental effects that may arise from the construction and operation of the facility.

1.1.2 In July 2014 Peel Environmental Management (UK) Ltd and Bilsthorpe Waste Ltd provided a "Regulation 22 Submission" to NCC in response to a request for "further information" pursuant to Regulation 22(1) of the Town and County Planning (Environmental Impact Assessment) Regulations 2011, hereafter referred to as the 2011 EIA Regulations. These documents were subsequently advertised for consultation under Regulation 22(3) of the 2011 EIA Regulations.

1.1.3 In August 2014 Peel Environmental Management (UK) Ltd and Bilsthorpe Waste Ltd provided a "Second Regulation 22 Submission" to NCC in response to an additional request for "further information" pursuant to Regulation 22(1) of the 2011 EIA Regulations. These documents were also subsequently advertised for consultation under Regulation 22(3) of the 2011 EIA Regulations.

1.1.4 The planning application was duly considered by the NCC Planning and Regulatory Committee on the 18th November 2014. The Committee resolved to approve the application. The decision was referred to the Secretary of State who, on 19th December 2014, under Section 77 of the Town and Country Planning Act 1990 (as amended), 'called-in' the application for his own determination. A Public Inquiry into the proposed development will commence on the 3rd November 2015.

1.1.5 This ‘third’ Regulation 22 Submission has been made voluntarily by the Applicants (Peel Environmental management UK Ltd – PEMUKL and Bilsthorpe Waste Ltd – BWL), in respect of the above application. It specifically seeks to provide further and other information in relation to updated ecology surveys and revised technical / facility design information. The information has been submitted specifically for the purposes of the Public Inquiry.

1.1.6 The ‘further information’ and ‘other information’ descried above is summarised in this document in non-technical language.

2.0 ECOLOGY AND NATURE CONSERVATION

2.1 Introduction / Background

2.1.1 A number of studies were carried out to inform the preparation of the ecological impact assessment contained within the original Environmental Statement, and subsequent Regulation 22 submissions.

2.1.2 Some of the ecological information that has informed the environmental assessment was collected in 2012 / 2013. Furthermore, since these surveys were carried out other developments have come forward within the survey area (specifically a solar farm development to the south of the application site) that could influence the baseline for the ecological assessment. As a consequence, the ecological surveys have been updated to provide the inspector and SoS with an adequate evidence base to consider the ecological impacts of the proposed development. The updated surveys comprise:

- An updated habitat survey of the proposed BEC site and mitigation area, to take into account natural vegetation succession and any other changes since 2013;
- A bat activity survey across the proposed BEC site and surrounding habitats, again to reflect habitat changes and data age (2012 surveys);
- An assessment of great crested newt presence / absence, because of data age (2012 survey), habitat changes, and the recent availability of improved detection techniques;
- An updated breeding bird survey of the Colliery site, to take into account habitat changes, including the implementation of the Solar Farm development to the south of the application site; and
- A dingy skipper butterfly survey of the proposed BEC site and land to the north, to take account of changes in habitat suitability on site since 2013.

2.1.3 Based on the results of these surveys, the conclusions of the ecological impact assessment have been updated to take account of any changes to the ecological baseline, and the proposed mitigation measures have been revised, leading to an updated Wader Mitigation Plan and consequent

changes to the Biodiversity Offsetting Metric (contained within the Wader Mitigation Plan report).

2.2 Changes to the Conclusions of the Ecological Impact Assessment

2.2.1 Most of the conclusions of the Ecological Impact Assessment (Chapter 8 of the ES Main Report) remain unchanged as a consequence of updated survey work.

2.2.2 The BEC site itself now has a higher biodiversity value, and its loss would be considered to have local scale significance. However, this is offset by mitigation measures which would give a net positive residual impact with respect to habitats.

2.2.3 Cumulative impacts on lapwing as a consequence of the BEC development are now demonstrably not significant, as the population has been lost from the wider Business Park site.

2.2.4 There is a potentially greater risk of impacts on dingy skipper butterflies, although this has been addressed by additional survey work and found not to be likely to occur.

2.2.5 Attention will be required to the timing of site clearance works and measures to prevent breeding of little ringed plover during the construction phase. Such matters can be addressed and enforced through a suitably worded planning condition and / or the Construction Management Plan.

3.0 R1 RECOVERY STATUS AND CLIMATE CHANGE BENEFITS

3.1 Introduction

3.1.1 On 21 August 2015, the Applicants submitted an application to the Environment Agency for classification of the BEC as an R1 Recovery Facility on the basis of design information (R1 is a weighted calculation of plant efficiency). The application is included as Appendix 3-1. This section of the submission explains the background to the R1 application and any implications for, or changes to, the Environmental Assessment.

3.2 R1 Application

3.2.1 As explained in Section 3.0 of the first Regulation 22 submission in July 2014, it was not possible at that time to make an R1 application. This was because there was insufficient detailed design information available. It was also because the application process, at that time, was not suitable for a gasification plant without a steam cycle. The Environment Agency changed the application process in September 2014, in order that it might be possible for an application to be made, but it was not possible to do this before the planning application was determined by NCC in November 2014 and, in any event, detailed design information was not available at that time. Therefore, the Applicant proposed, and the Council agreed, that a planning condition should be imposed to require the plant to achieve R1 design status.

3.2.2 Following the calling-in of the application, the Applicant has been provided with the necessary detailed design information to make the R1 application. The detailed design process has led to a number of changes to the technical details of the scheme, although it is important to note that there are no changes to the external appearance of the plant, nor to the direct environmental impacts.

- A design stage application for R1 status must be based on a single design point. The selected design point is waste with a net calorific value of 12.581 MJ/kg.
- The waste feed rate to the gasifier remains at 95,000 tonnes per year.
- The supplier of the gas engine has now been selected and the supplier has been able to guarantee a higher efficiency than had been anticipated

originally. Hence, the plant is expected to generate 13.77 MW of power, giving a gross efficiency (based on power generated) of 28.8%, and export 9.77 MW, giving a net efficiency (based on power exported after allowing for on-site use) of 20.44%. This is an increase in the power from 13.6MW in the original ES (paragraph 1.2.2 of the ES Vol 1 Main report) and an increase in efficiency (mentioned in paragraph 7.1.2 of the First Regulation 22 submission - July 2014), which was 18.48%.

3.2.3 The R1 value in the application is 0.6756, which is higher than the threshold value of 0.65 and confirms that the BEC would be classified as a 'Recovery' facility.

3.3 Climate Change Benefits

3.3.1 The increase in efficiency and detailed design information has allowed for the carbon assessment presented in the second Regulation 22 submission to be updated.

3.3.2 The revised carbon assessment confirms that the BEC development is now predicted to displace between 15,800 and 23,100 tonnes of CO_2 equivalent, compared to the figures in the second Regulation 22 submission of 5,800 to 7,900 tonnes of CO_2 equivalent.

4.0 RENEWABLE ENERGY

4.1 In preparing evidence for this Inquiry, the Applicant has also noted an error in the scheme description with regard to the stated percentage of renewable energy that would be generated by the BEC. Environmental Statement (ES) Main Report paragraph 4.1.5 states that the biodegradable or biomass content of the waste *"is recognised as a renewable source of energy and as such, around 60% of the energy produced by the proposed BEC development would be classed as renewable"*. However, reference to the ES Second Regulation 22 Submission Appendix 4-1 page 3, Table 10.2, indicates that this is not correct. Table 10.2 does identify that the average biodegradable content by mass in the target waste is indeed 60.81%. However, the same table also identifies that the average biodegradable energy content is actually 50.62%. It is the actual energy content of the waste that dictates the percentage of energy generated that can be classed as renewable. Accordingly, this is 50.62% and not 60% as stated in the ES.

5.0 CONTRIBUTION TO LOCAL RENEWABLE ENERGY NEED

5.1 Introduction

5.1.1 As noted previously in this submission the Application Proposal has, since the submission of the planning application, been subject to on-going design work which largely relates to the specification and performance evaluation of the process equipment. As a result of this work it has been established that:

1) the gross electrical output from the gas engines has increased from 13.6MW to 13.77MW and the net power available for export to the electricity grid has increased from 9.6MW to 9.77MW.
2) the percentage of energy generated that can be classed as renewable is 50.62% and not 60% as stated in the ES

5.1.2 Section 3.5 of the Planning Statement submitted in support of the planning application considers the contribution that the facility would make to local renewable energy needs (assessed at a regional level). This concludes that the development of the facility would increase the currently installed capacity in the region by circa 3.67%. The assessment relies upon both the electrical output of the facility and the percentage of renewable energy generated. Furthermore, the assessment also relies upon statistical data produced by the Department of Energy and Climate Change (DECC).

5.2 Contribution to Local Renewable Energy Need

5.2.1 The figures for the electrical output of the facility and the percentage of renewable energy generated have changed and more recent statistical data has been published by DECC since the original assessment was carried out. As such, the assessment needs to be updated.

5.2.2 Electricity data for the East Midlands Region published by DECC in March 2013[1] shows the most recent total electricity consumption figures. This shows that total electricity consumption in the East Midlands was 21,113GWh.

[1] https://www.gov.uk/government/statistical-data-sets/regional-and-local-authority-electricity-consumption-statistics-2005-to-2011

5.2.3 DECC's most recent regional ReSTATs data (for the calendar year of 2013[2]) shows that the total renewables electricity generation in the East Midlands in 2013 was 2,435.0 GWh. This equates to 11.5% of the region's consumption.

5.2.4 Based on the available DECC data, the East Midlands Region is failing in the deployment of renewables and meeting its obligations to contribute to the national renewables target of 15% by 2020. Furthermore, when considered in light of the government's 'lead scenario' to achieve the 2020 target, the poor contribution of the region towards 30% of electricity from renewables is even more apparent.

5.2.5 In light of the above, any development that assists the East Midlands Region to meet its share of the national renewable energy target (which is being missed), should be afforded significant weight in terms of the benefit it brings.

5.2.6 As stated previously, the proposed BEC development would generate 13.77MW of electricity. Of the electricity generated, it has been assumed that 50.62% would be classed as renewable. This would equate to 6.97MW of the electricity generated by the BEC. Based upon 7,600 hours of generation per annum, the facility would generate 52,972MWh/yr (52.97GWh/yr) 'net' of renewable electricity. This would increase the current installed capacity in the region by circa **2.18%.**

5.2.7 Whilst the contribution that the proposed BEC development would make to increasing renewable electricity production in the region is less than originally assessed, it is still a considerable benefit of the scheme and will contribute towards local (and national) renewable energy targets.

[2] *DECC ReSTATS 2013 Data table - see: https://www.gov.uk/government/statistics/regional-renewable-statistics*

6.0 SUMMARY AND CONCLUSIONS

6.1 In November 2013 Peel Environmental Management (UK) Ltd and Bilsthorpe Waste Ltd (the applicants) submitted a planning application, reference 3/13/01767/CMW, to Nottinghamshire County Council (NCC) for the development of Bilsthorpe Energy Centre, a combined Materials Recovery Facility and Plasma Gasification Facility, on land at Bilsthorpe Business Park, Eakring Road, Bilsthorpe, Nottinghamshire.

6.2 In July 2014 and August 2014 the applicants provided submissions under Regulation 22 of The Town and Country Planning (Environmental Impact Assessment) Regulations 2011 to NCC that contained additional information on the potential environmental effects of the proposed BEC development.

6.3 This 'third' Regulation 22 Submission has been made voluntarily by the Applicants (Peel Environmental management UK Ltd – PEMUKL and Bilsthorpe Waste Ltd – BWL), in respect of the above application. It specifically seeks to provide further and other information in relation to updated ecology surveys and revised technical / facility design information which informed an application to the Environment Agency for classification of the BEC as an R1 Recovery Facility.

6.4 The further / other information does not identify any additional environmental impacts and does not alter the conclusions presented within the ES.