

Portland
energy recovery
facility

Environmental statement



1 Introduction

Application summary

- 1.1 Powerfuel Portland Limited is applying to Dorset Council for full planning permission to develop land within Portland Port for an energy recovery facility (ERF) fuelled by refuse-derived fuel (RDF). Figure 1.1 shows the application boundary and the location of the site in relation to Portland.
- 1.2 This environmental statement (ES) is required to accompany the planning application under the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended; hereafter the EIA Regulations). It contains detailed information needed by the local planning authority to assist in its determination of the application.

Background

- 1.3 The former Weymouth and Portland Borough Council granted full planning permission in early 2010 to develop the site for an energy plant (application reference: 09/00646/FULES). By condition, the plant was to be fuelled by “vegetable oil”, while the description in various application documents clarified that this included “waste oils”.
- 1.4 In 2013, the conditions of the planning permission were varied through a section 73 application to enable waste rubber crumb from end-of-life tyres to be used as an alternative fuel source (application reference: 13/00262/VOC). The rubber crumb was to undergo thermal treatment similar to pyrolysis in an advanced conversion technology, rather than being directly combusted, producing oil, gas and carbon black. The oil and gas were intended to be combusted in generators for power generation. The originally consented development includes two 8.9 MWe engines and two 27 m high stacks, while the revised consent adds four smaller generators with a total capacity of 6 MW. The 2010 and 2013 permissions were not mutually exclusive and were not restricted so as to be phased.
- 1.5 The original full application was subject to environmental impact assessment (EIA) and accompanied by an ES, which was updated in 2013 to support the section 73 application.
- 1.6 The original plans for an energy plant were never completed and the development company that led the plans (W4B Portland Limited) has since been dissolved under the UK Register of Companies. However, the development was lawfully commenced with, amongst other works, the demolition of a building and the planning permission remains extant. Dorset Council issued a lawful development certificate on 18 October 2019 confirming this position.
- 1.7 Powerfuel Portland Limited has entered into an agreement for lease with Portland Port in relation to the site and is now bringing forward a new full application to develop the site for an ERF fuelled by RDF, which is a more standard and robust technology for the recovery of energy from waste.

Environmental impact assessment

- 1.8 EIA is a process for ensuring that the likely significant effects of a new development on the environment are fully understood and taken into account before development is allowed to proceed. The aim of EIA is defined in the Ministry of Housing, Communities and Local Government’s (MHCLG) online National Planning Practice Guidance: *Environmental Impact Assessment* (NPPG; updated 2020) (paragraph 002, reference ID: 4-002-20140306) as:

“to protect the environment by ensuring that a local planning authority when deciding whether to grant planning permission for a project, which is likely to have significant effects on the environment, does so in the full knowledge of the likely significant effects, and takes this into account in the decision making process.”

- 1.9 EIA is integral to the planning process, but it is also a separate and objective assessment of the potential effects of the proposals, allowing the local planning authority to make an informed decision. The EIA Regulations implement the requirements of EU Directive 2011/92/EU ‘on the assessment of effects of certain public and private projects on the environment’, as amended by Directive 2014/52/EU.
- 1.10 To satisfy the requirements of Regulation 18(3) of the EIA Regulations, an ES must address the matters listed in table 1.1. It must also include such of the information set out in schedule 4 of the EIA Regulations as is relevant to the specific characteristics of the particular development (or type of development) and to the environmental features likely to be significantly affected (see table 1.2). This will ensure that the ES includes the information reasonably required for reaching a reasoned conclusion on the significant effects of the development on the environment, taking into account current knowledge and methods of assessment.

Required topic	Location in ES
A description of the proposed development, comprising information on the site, design, size and other relevant features of the development	Chapter 2
A description of the likely significant effects of the proposed development on the environment	Chapters 4 to 13 (predicted effects sections)
A description of any features of the proposed development, or measures envisaged in order to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment	Chapters 4 to 13 (mitigation sections), chapter 14 (summaries of mitigation measures) and technical appendix C (framework construction environmental management plan (CEMP))
A description of the reasonable alternatives studied by the developer that are relevant to the proposed development and its specific characteristics and an indication of the main reasons for the option chosen, taking into account the effects of the development on the environment	Chapter 2 (alternatives section)
A non-technical summary of the information provided in rows 1 to 4 above	Non-technical summary at the front of this document

Table 1.1: Summary of matters that an ES must address

Topic	Location in ES
<p>A description of the development, including in particular:</p> <ul style="list-style-type: none"> • A description of the location of the development • A description of the physical characteristics of the whole development, including, where relevant, requisite demolition works, and the land use requirements during the construction and operational phases • A description of the main characteristics of the operational phase of the development (in particular, any production processes), for instance energy demand and energy used, nature and quantity of the materials and natural resources (including water, land, soil and biodiversity) used • An estimate, by type and quantity, of expected residues and emissions (such as water, air, soil and subsoil pollution, noise, vibration, light, heat, radiation and quantities and types of waste) produced during the construction and operation phases 	Chapter 2, where applicable
A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects	Chapter 2 (alternatives section)
A description of the relevant aspects of the current state of the environment (baseline scenario) and an outline of the likely evolution thereof without implementation of the development as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge	Chapters 4 to 13 (baseline and future baseline sections)
A description of the factors likely to be significantly affected by the development: population, human health, biodiversity (for example fauna and flora), land (for example land take), soil (for example organic matter, erosion, compaction, sealing), water (for example hydromorphological changes, quantity and quality), air, climate (for example greenhouse gas emissions, impacts relevant to adaptation), material assets, cultural heritage, including architectural and archaeological aspects, and landscape	Chapters 4 to 13 (baseline sections). See chapter 3 for details of the scope of the EIA
<p>A description of the likely significant effects of the development on the environment, resulting from, inter alia:</p> <ul style="list-style-type: none"> • The construction and existence of the development, including, where relevant, demolition works • The use of natural resources, in particular land, soil, water and biodiversity, considering as far as possible the sustainable availability of these resources • The emission of pollutants, noise, vibration, light, heat and radiation, the creation of nuisances and the disposal and recovery of waste • The risks to human health, cultural heritage or the environment (for example due to accidents or disasters) • The cumulation of effects with other existing and / or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources • The impact of the project on climate (for example the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change • The technologies and the substances used <p>The description of the likely significant effects should cover the direct effects and any indirect, secondary, cumulative, transboundary, short term, medium term and long term, permanent and temporary, positive and negative effects of the development. This description should take into account the environmental protection objectives established at Union or Member State level that are relevant to the project, including in particular those established under Council Directive 92/43/EEC and Directive 2009/147/EC</p>	Chapters 4 to 13 (predicted effects sections). See chapter 3 for details of the scope of the EIA
A description of the forecasting methods or evidence used to identify and assess the significant effects on the environment, including details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information and the main uncertainties involved	Chapters 4 to 13 (methodology sections)

Topic	Location in ES
A description of the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment and, where appropriate, of any proposed monitoring arrangements (for example, the preparation of a post-project analysis). That description should explain the extent to which significant adverse effects on the environment are avoided, prevented, reduced or offset, and should cover both the construction and operational phases	Chapters 4 to 13 (mitigation and monitoring sections), chapter 14 (summaries of mitigation and monitoring measures) and technical appendix C (framework CEMP)
A description of the expected significant adverse effects of the development on the environment deriving from the vulnerability of the development to risks of major accidents and / or disasters that are relevant to the project concerned. Relevant information available and obtained through risk assessments pursuant to EU legislation such as Directive 2012/18/EU of the European Parliament and of the Council or Council Directive 2009/71/Euratom or UK environmental assessments may be used for this purpose provided that the requirements of this Directive are met. Where appropriate, this description should include measures envisaged to prevent or mitigate the significant adverse effects of such events on the environment and details of the preparedness for and proposed response to such emergencies	This issue was scoped out of the EIA (see chapter 3 and technical appendix A for details), although brief coverage is provided in chapter 2
A non-technical summary of the information provided in rows 1 to 8 above	Non-technical summary at the front of this document
A reference list detailing the sources used for the descriptions and assessments included in the ES	Chapters 4 to 13 (tables of references and data sources)

Table 1.2: Further information that an ES must also address where relevant

- 1.11 This ES has been produced in accordance with the EIA Regulations and best practice guidance issued by the government and other organisations, such as the Institute of Environmental Management and Assessment (IEMA). It has been prepared by Terence O'Rourke Ltd based on information gathered during a formal EIA of the proposals undertaken between October 2019 and August 2020. Regard was had to the findings of other relevant assessments as appropriate, to avoid duplication of assessment.
- 1.12 The scope of the EIA was the subject of consultation with planning and environmental officers from Dorset Council and with a range of other organisations, including Natural England, the Environment Agency and Historic England (see chapter 3 for full list of consultees). The EIA Regulations require the ES to be based on the most recent scoping opinion, where one is issued. The scoping process is discussed in more detail in chapter 3 and a copy of the scoping report that accompanied the request for a scoping opinion has been reproduced in technical appendix A, together with the consultee responses.

The applicant

- 1.13 Powerfuel Portland Limited is a local company with an office in Dorset, whose Directors have an extensive experience of delivering large-scale renewable energy facilities.

The consultant team

- 1.14 The coordination of the EIA, the preparation of the ES and the assessment of potential community, cultural heritage, landscape, seascape and visual, off-site natural heritage, waste and world heritage site effects of the proposals have been undertaken by Terence O'Rourke Ltd, which is a member of the IEMA EIA

Quality Mark scheme. Assessments of other environmental issues have been undertaken as follows:

- Air quality and carbon balance and greenhouse gas emissions – Fichtner Consulting Engineers Ltd
- Economic effects, human health risk assessment and health impact assessment – ERM
- Ground conditions and water quality – Arup
- On-site natural heritage – CGO Ecology Ltd and Lindsay Carrington Ecological Services Ltd
- Traffic and transport – Awcock Ward Partnership (AWP)

1.15 Details of the relevant expertise and qualifications of the competent experts involved in the preparation of the ES are provided in technical appendix B.

The structure of the ES

1.16 This ES is divided into three main sections. Part one (chapters 1 to 3) provides the background to the application site, describes the development proposals and identifies the environmental issues that have been considered as part of the EIA. Part two (chapters 4 to 13) sets out the potential environmental effects of the proposals and highlights the mitigation measures that will be employed to reduce the overall environmental impacts of the scheme. Part three (chapter 14) summarises the design measures that aim to avoid significant adverse environmental effects and form an integral part of the proposals, the proposed mitigation measures and how these will be implemented, the residual effects remaining after mitigation, and the measures proposed to monitor adverse environmental effects.

1.17 A glossary is included at the back of the ES to explain essential terminology used in the text. Technical appendices have been produced providing detailed information on the EIA scoping process, the competent experts involved in the EIA and several of the environmental issues. The non-technical summary (NTS) is at the front of the ES and is also available separately.

Further information

1.18 Copies of the ES and the technical appendices have been sent to Dorset Council. The full ES with its technical appendices may (subject to COVID-19 restrictions) be available for inspection at:

Dorset Council
County Hall
Colliton Park
Dorchester
Dorset
DT1 1XJ

1.19 The application documents will also be available to view on the council's website: <https://planning.dorset.gov.uk/public-access/>.

1.20 Comments should be addressed to the Head of Development Control at the above address and copied to Terence O'Rourke Ltd at the address below.

Additional copies of the ES (paper copy or CD) and any further information about the project may be obtained at a reasonable charge to reflect printing and distribution costs by contacting:

Terence O'Rourke Ltd
Everdene House
Deansleigh Road
Bournemouth
Dorset
BH7 7DU

Tel: 020 3664 6755

E-mail: maildesk@torltd.co.uk



Site boundary

0 250 m



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Figure 1.1 Site location and application boundary