Lighthouse Green Fuels Development Consent Order

Preliminary Environmental Information Report

Chapter 2: Assessment Methodology

Planning Inspectorate Reference: EN0110025

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Contents

Tables

1. Assessment Methodology

1.1 Introduction

1.1.1 This chapter provides an overview of the approach to the preliminary Environmental Impact Assessment (EIA), including the approach to the EIA assessment scenarios and general methodology used to provide consistency across assessment aspects.

1.1.2 An EIA is a staged, iterative process, the final findings of which will be reported in an Environmental Statement (ES) submitted in support of the application for a Development Consent Order (DCO) which if granted would consent the Proposed Development and allow it to be constructed, operated and decommissioned. This Preliminary Environmental Information Report (PEIR) describes the findings of a preliminary assessment of the likely significant effects of the Proposed Development and has been undertaken in accordance with the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (SI 2017 No. 572) ("the EIA Regulations") (Ref 1) and relevant guidance, and each of the stages are described in the following sections.

1.1.3 This preliminary assessment has been undertaken using information available at the time of writing and has been prepared to provide the information reasonably required for readers to develop an informed view of the likely significant environmental effects of the Proposed Development.

1.1.4 The scope and adopted methodologies of assessment for each of the investigated environment aspects are outlined in the corresponding aspect chapters (Chapters 8 - 21 in PEIR Volume 1) where they depart from this general methodology.

2. Approach to EIA

2.1 Overview

2.1.1 An EIA is a systematic process that examines the likely significant effects (beneficial or detrimental) on the environment resulting from the future construction, operation and decommissioning of a proposed development. The findings of an EIA are presented in a document known as an ES, which can then be used to inform decision makers and the public about the possible environmental implications of a development and help the decision maker determine the application for consent, which for a DCO is the relevant Secretary of State (SoS). The EIA Regulations set out the procedures to be followed in relation to EIAs which must be undertaken for Nationally Significant Infrastructure Projects (NSIPs) in England and Wales.

2.1.2 The EIA Regulations require that the preliminary environmental information, referred to in Regulation 14(2), is provided as part of the duty to consult under the Planning Act 2008 (the Act) (Ref 2). This PEIR has been prepared in accordance with the EIA Regulations and the location of required information in this document is provided in Table 1-2, of this chapter.

2.1.3 The main stages of the EIA process are as follows:

- EIA Screening: Screening can be undertaken to determine whether a proposed project constitutes 'EIA development', in cases where it is not clear if a project requires an EIA to be undertaken. In this case, the Applicant concluded that the Proposed Development was described in Schedule 2 of EIA Regulations and had the potential to result in significant environmental effects. Therefore, the Applicant informed the Planning Inspectorate that they intended to submit an ES with the DCO application, making the Proposed Development EIA Development;
- EIA Scoping: Scoping refers to the process of consultation with the Planning Inspectorate and relevant consultees to identify the necessary scope of assessment and the methodology to be employed for any particular development, described in further detail below;
- PEIR: The PEIR (this document) sets out the information that the Applicant has compiled and, "is reasonably required for the consultation bodies to develop an informed view of the likely significant environmental effects of the development", (Regulation 12(2) of the EIA Regulations) as set out in Planning Inspectorate Advice Note Seven, Section 8.3; and
- ES: The ES presents the results of the EIA undertaken for a proposed development. It sets out the likely significant effects that would result if the proposed development was implemented, and any proposed mitigation to reduce those significant effects. An ES is submitted as part of the application for development consent and is taken into account during the decision-making process.

2.2 EIA Scoping

2.2.1 EIA Scoping is the process of identifying the issues to be considered within the ES and establishing the scope of the assessment. Although scoping is not a mandatory requirement under the EIA Regulations, it is recognised as a useful preliminary procedure which helps to identify the main effects that a proposed development is likely to have on the environment and should therefore be assessed and reported in the ES.

2.2.2 An EIA Scoping Report was prepared and submitted to the Planning Inspectorate on 01 October 2025 with a request for the SoS to adopt a scoping opinion in relation to the Proposed Development. In considering the request for a scoping opinion, the SoS consulted with the relevant statutory stakeholder bodies. The Scoping Opinion was issued by the Planning Inspectorate on 11 November 2025. The EIA Scoping Report and Scoping Opinion are provided in Appendices 1A and 1B, respectively (PEIR Volume 3).

2.2.3 A table outlining the key issues raised in the Scoping Opinion and how and where they are addressed in the ES or other DCO application documentation will be included in the ES.

2.2.4 Prior to and following receipt of the Planning Inspectorate's Scoping Opinion and associated consultee responses, engagement has been undertaken with stakeholders including the Planning Inspectorate to inform further EIA work to be undertaken and to provide clarifications. A summary of the agreed scope of the EIA is presented in Table 1-1.

Table 2-1 Summary of Proposed Scope of EIA

Aspect (PEIR Volume 1)	Scoped In/ Out of ES	Notes
Air quality	In	-
Noise and Vibration	In	-
Terrestrial Ecology	In	-
Marine and Freshwater Ecology	In	-
Water Environment and Flood Risk	In	-
Landscape and Visual	In	-
Greenhouse Gases	In	-
Climate Change Resilience	In	-
Materials and Waste	In	-
Socio-Economics	In	-
Population and Human Health	In	Included in Socio-Economics
Traffic and Transport	In	-

Aspect (PEIR Volume 1)	Scoped In/ Out of ES	Notes
Major Accidents and Disasters	In	-
Marine Navigation	In	-
Cultural Heritage	Out	-
Geology and Soils	In	-

2.2.5 The structure and content of the PEIR is set out in Table 1-2.

Table 2-2 Information Required in the PEIR

Information required to be included as part of the PEIR (Regulation 14(2) of the EIA Regulations)	Relevant Parts of this PEIR (Volume 1)
(a) A description of the proposed development comprising information on the site, design, size and other relevant features of the development	Chapter 4 The Proposed Development
(b) A description of the likely significant effects of the proposed development on the environment	Chapters 8 to 22
(c) 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 8 to 22
(d) A description of the reasonable alternatives studied by the applicant, which 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 6 Alternatives and Design Evolution
(e) A non-technical summary of the information referred to in sub-paragraphs (a) to (d) in this table	Non-Technical Summary (Standalone Document)
(f) Any additional information specified in Schedule 4, relevant to the specific characteristics of the particular development or type of development and to the environmental features likely to be significantly affected	Chapter 4 The Proposed Development Chapters 8 to 22

2.2.6 The requirements of Regulation 14(2) summarised in Table 1-2 are expanded on in Schedule 4 of the EIA Regulations at sub-paragraph (f). The detailed requirements of Schedule 4 are addressed in the chapters of this PEIR (Volume 1) and will be addressed in the ES.

2.2.7 In preparing this PEIR, reference has been made to relevant guidance and advice. This has included the following:

- Overarching National Policy Statement (NPS) for Energy (EN-1) (Ref 3);
- Overarching NPS for Renewable Energy Infrastructure (EN-3) (Ref 4);
- National Planning Policy Framework (NPPF) (Ref 5);
- Planning Inspectorate's Advice Page: Nationally Significant Infrastructure Projects: Advice on the Preparation and Submission of Application Documents (Ref 6);
- Planning Inspectorate's Advice Page: Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment (Ref 7);
- Planning Inspectorate's Advice Page: Nationally Significant Infrastructure Projects: Advice on Habitats Regulations Assessments (Ref 8);
- Planning Inspectorate's Advice Page: Nationally Significant Infrastructure Projects: Advice on the Water Framework Directive (Ref 9);
- Planning Inspectorate's Advice Page: Nationally Significant Infrastructure Projects: Advice on Transboundary Impacts and Process (Ref 10);
- Planning Inspectorate Advice Note Seven: Environmental Impact Assessment: process, preliminary environmental information and environmental statement (Ref 11); and
- Planning Inspectorate Advice Note Nine: Rochdale Envelope (Ref 12).

2.3 Assumptions and Limitations

2.3.1 In accordance with the EIA Regulations, difficulties encountered during assessment work, and the limitations and assumptions used for individual assessment areas are set out in this PEIR and will be in the subsequent ES.

2.3.2 Limitations at this PEIR stage include:

- Baseline conditions are specific to each aspect of the environment and are considered to be accurate at the time when surveys are undertaken. However, it is recognised that environmental conditions may change during the course of the Proposed Development, and so these are described as appropriate as part of the future baseline;
- The preliminary assessment presented in this PEIR is based on the survey work completed at the time of writing. Each aspect chapter sets out what additional surveys will be undertaken prior to submission of the DCO application;
- The preliminary assessment presented in this PEIR is based on construction information available at the time of writing, which is based

on the construction phases and programme described in Chapter 5 (PEIR Volume1); and

- The assessment of cumulative effects is dependent on the availability of information at the time of assessment in relation to other identified developments.

2.3.3 Best practice guidance from the Institute of Sustainability and Environmental Professionals (ISEP) has also informed the assessment. Relevant to this PEIR, is the growing emphasis on undertaking proportionate assessments which reflect those aspects of the environment with potential to have significant effects and clarify those areas where there is little reasonable potential for this to occur.

2.3.4 Unless stated otherwise, any references to legislation within the PEIR is as amended and in force at the time of compiling this report. These references will be reviewed and updated, if required, as part of the preparation of the ES.

2.4 Parameters, Uncertainty and Flexibility

2.4.1 As discussed in Chapter 4 Proposed Development (PEIR Volume 1), final detailed design decisions have yet to be taken for the Proposed Development. This is to maintain flexibility to meet the changing demands of the UK market as the design of the Proposed Development progresses. The 'Rochdale Envelope' approach has therefore been applied within the EIA process to ensure a robust assessment of the likely significant environmental effects of the Proposed Development. This is in accordance with the Planning Inspectorate's Advice Note Nine: The Rochdale Envelope (Ref 12). This approach involves assessing the maximum and, where relevant, minimum parameters for the elements where flexibility is sought, recognising that the worst-case parameter for one technical assessment may differ from another. Where this approach is applied, it has been confirmed within the relevant chapters.

2.4.2 These parameters have been used in the assessment of significance of effects in each of the Chapters 8 to 22 (PEIR Volume 1). The parameters that have been applied to relevant aspects are described. As the Proposed Development's design evolves, key elements of the design may be fixed. However, at the time of writing, some aspects of the Proposed Development remain uncertain or retain a degree of optionality and/or flexibility. This is to allow significant effects to be identified and assessed while the design development and decisions are progressed, as further information is gathered and feedback from consultees is sought. The key areas of uncertainty, flexibility, and any optionality that remains at this stage includes:

- Exact locations of project elements within the Main Site;
- Lateral and vertical dimensions of project elements; and
- Exact routeing and construction details for utility connections.

2.4.3 It is likely that flexibility will need to be maintained for some aspects of the Proposed Development for the DCO application itself. Where flexibility is to be retained in the application, the Applicant will secure measures as part of the DCO to ensure that the final design remains within the likely worst-case envelope as assessed in the ES.

3. Consultation and Engagement

3.1 Overview

3.1.1 Effective and meaningful engagement and consultation with stakeholders is an essential aspect of developing the design of the Proposed Development and of undertaking a comprehensive EIA. Statutory consultation is an ongoing process, and the publication of this PEIR forms an important part of that process.

3.1.2 The issues raised through the statutory consultation and how these have been considered and addressed within the design evolution of the Proposed Development and the EIA will be set out in the ES, where appropriate. Otherwise, they will be covered in the Consultation Report published with the DCO application.

3.1.3 Compliance with the requirements of the Act and the EIA Regulations will be evidenced in a Consultation Report and the ES submitted with the DCO application. In addition, details of the pre-application consultation undertaken throughout the design and assessment of the Proposed Development will be included.

3.1.4 Consultation with statutory consultees and stakeholders is ongoing, to help inform the content of the ES and the design of the Proposed Development.

3.1.5 A number of meetings have taken place with stakeholders to share information on the Proposed Development and the approach to environmental assessment including, but not limited to, the following:

- Stockton-on-Tees Borough Council;
- Redcar and Cleveland Borough Council;
- The Planning Inspectorate;
- Environment Agency;
- Natural England; and
- Marine Management Organisation.

3.1.6 In addition to engagement with relevant statutory consultees, the Applicant has been in discussions with the main landowners affected by the Proposed Development.

4. Baseline Conditions

4.1 Existing Baseline

4.1.1 To predict the potential environmental effects of the Proposed Development, it is important to establish the baseline conditions that currently exist within the draft Order Limits and its surroundings, in the absence of any development.

4.1.2 Detailed environmental information relating to the existing environmental baseline has been collected. This baseline information has been gathered from various sources, including:

- Online/digital resources;
- Data searches, e.g., Local Biological Record Centres, Historic Environment Record;
- Baseline site surveys; and
- Available environmental information submitted in support of other planning applications for development in the vicinity of the Proposed Development.

4.1.3 The current environmental and physical conditions of the relevant study areas ('the baseline') have been established, so that a comparison of future changes from the Proposed Development can be understood, and potentially significant effects can be identified.

4.1.4 Site visits, walkover surveys and initial desk-based baseline data collection have been undertaken to determine the baseline conditions. Details of specific visits and survey results will be provided in individual assessment chapters of the ES. Where further studies remain to be complete, they are made clear in the relevant assessment chapters of this PEIR. The full results from all baseline data collection and surveys will be described within the ES.

4.1.5 The baseline conditions used within the assessment and information used to define it are detailed within Chapters 8 to 21 (PEIR Volume 1), with any relevant limitations and assumptions.

4.2 Future Baseline

4.2.1 Where relevant, the environmental conditions in the future have been considered so that the impact of the Proposed Development can be assessed against the baseline conditions that would occur in the future without the Proposed Development being constructed and operated (the 'future baseline'). Where future conditions are considered relevant, and likely to change to the extent that they need to be considered, they are

described at the end of the baseline section of each technical assessment chapter of the PEIR.

4.2.2 The future baseline can also change as a result of other developments being constructed within the study areas or zones of influence used in the assessment of a proposed development. Chapter 22 Cumulative and Combined Effects (PEIR Volume 1) describes how other developments are identified, information gathered, and cumulative effects assessed. The cumulative assessment follows advice from the Planning Inspectorate of Cumulative Effects Assessment (CEA) (Ref 7), which states:

"Where other existing and, or approved developments are expected to be completed before construction of the proposed NSIP and the effects are fully determined, effects arising from them should be considered as part of the baseline and may be considered as part of both the construction and operational assessment.

If the effects of other existing and, or approved development under construction are not yet fully determined, for example the outcome of mitigation is being monitored and is not yet known, it may be appropriate to consider these in the CEA."

4.2.3 The other developments identified as part of the cumulative effects assessment include developments which are planned to be completed before construction of the Proposed Development, and have effects determined, and should therefore be considered as part of the future baseline in the ES.

5. Spatial and Temporal Scope

5.1.1 Spatially, the area over which effects could occur may be wider than the draft Order Limits. The appropriate study area has been determined for each environmental aspect and set out in PEIR Chapters 8 to 21 (Volume 1). Specific study areas are defined in each aspect section and allow for assessment of indirect as well as direct effects, together with relevant factors outside of the Proposed Development, such as proposed traffic routes. They are also used to inform the assessment of cumulative effects in Chapter 22 Cumulative and Combined Effects (PEIR Volume 1).

5.1.2 Specific temporal periods are defined for the assessment of baseline conditions and the impacts of the Proposed Development. In doing so, consideration is given to the worst-case durations of construction and operational activities. Where relevant, consideration is given to the duration it could take for environmental design measures to become established and effective. Timeframes for which mitigation measures are likely to have achieved their desired outcome will be defined within the ES.

5.1.3 The assessment considers effects at the construction, operation and decommissioning phases. The definitions of these are presented in Table 1-3. The future baseline scenario describes the changes from the current baseline scenario as far as natural changes can be established. Although it is noted that without the Proposed Development the draft Order Limits would continue to be a cleared and derelict industrial site.

Table 5-1 Baseline Scenarios

Baseline Scenarios	Description
Construction phase – current baseline (Year One)	This relates to all works associated with construction of the Proposed Development.
Operational phase – future baseline (from Year Three)	This relates to effects once the Proposed Development is installed and in use.
Decommissioning phase – future baseline (after Year 25)	This relates to effects at the end of operation as the Proposed Development is shut down. The decommissioning year will take place following the operation of the Proposed Development, which is expected to be at least 25 years from the date of commissioning. Decommissioning is expected to take 1-2 years.

6. Assessment of Effects

6.1 Significance of Effect

6.1.1 The likely effect that the Proposed Development may have on identified environmental receptors is influenced by a combination of the sensitivity or importance of the receptor and the predicted magnitude of impact on the receptor or change from the baseline conditions. The overall significance of the effect is assigned by the combination of both sensitivity of the receptor and magnitude of impact.

6.2 Assigning Value of Receptors

6.2.1 Receptors are defined as the physical or biological resource or human user group that would experience an effect of the Proposed Development, and these are identified as part of developing the baseline conditions.

6.2.2 The environmental effect of the Proposed Development on receptors depends on the spatial relationship between the source of the effect and the receptor, as well as the environmental sensitivity of a receptor.

6.2.3 Assignment of environmental sensitivity of a receptor generally depends on the vulnerability, recoverability and value/importance of the receptor. The environmental sensitivity or importance is determined using categories defined for each aspect specific methodology. A typical example is presented in Table 1-4.

6.2.4 Where specific criteria for sensitivity/value have been used in accordance with best practice for a technical assessment, these are set out and used in the aspect assessment.

Table 6-1 Indicative Environmental Sensitivity of a Receptor

Sensitivity	Criteria
High	High importance and rarity, international level and very limited potential for substitution; unable to tolerate change.
Medium	High or medium importance and rarity, regional level and limited potential for substitution; limited capacity to tolerate change.
Low	Low or medium importance and rarity; and local level; capable of tolerating some change.
Negligible	Very low importance or rarity and local level; high capacity for change.

6.3 Magnitude of Impact

6.3.1 Magnitude of impact is defined by the extent of change from the identified baseline conditions, irrespective of the value/sensitivity of a receptors.

6.3.2 The categorisation of the magnitude of impact considers the following factors where relevant:

- Extent;
- Duration;
- Frequency; and
- Reversibility.

6.3.3 Impacts are defined as either beneficial or adverse. A typical set of magnitude criteria that are used in assessment is outlined in Table 1-5.

Table 6-2 Indicative Magnitude of Impact

Magnitude	Criteria
High	Total loss or major alteration to key elements/features of the baseline conditions.
Medium	Partial loss or alteration to one or more key elements/features of the baseline conditions.
Low	Minor shift away from baseline conditions.
Negligible	Very slight change from baseline conditions.

6.3.4 Where other specific categories criteria for magnitude have been used in accordance with best practice for any technical assessment, these are set out and used in the individual aspect assessments.

6.4 Assigning Significance

6.4.1 The level of significance is determined in each of the environmental aspect assessments and considers relevant aspect-specific legislation, planning policy and guidance. Levels of significance of effects generally follow the example matrix outlined in Table 1-6 and are either beneficial or adverse.

Table 6-3 Indicative Magnitude of Impact

Magnitude of Impact					
Sensitivity of Receptor		**High**	**Medium**	**Low**	**Very Low**
	High	Major	Major	Moderate	Minor
	Medium	Major	Moderate	Minor	Negligible
	Low	Moderate	Minor	Negligible	Negligible
	Negligible	Minor	Negligible	Negligible	Negligible

6.4.2 A general description of the magnitude of impact of Negligible, Minor, Moderate and Major is provided in Table 6-4. Typically, Moderate or Major effects are considered significant in EIA terms, and Negligible or Minor

effects are not significant. The conclusions of the significance of each impact considers embedded design, good practice and additional mitigation measures, depending on the stage of the EIA.

6.4.3 This matrix approach is provided as an example and is not prescriptive. Professional judgement can be applied in determining the significance of an effect when the assessment is supported by a clear narrative to justify the conclusions reached.

6.4.4 The aspect assessments can adopt this approach to assigning significance. However, typically industry-specific guidance is applied to aspects where available, and these specific criteria are stated in the aspect chapters.

6.4.5 The likely residual effects of the Proposed Development are set out for each aspect assuming implementation of all mitigation measures identified. This includes an assessment of significance of those effects in accordance with the identified criteria.

Table 6-4 Indicative Magnitude of Impact

Magnitude	Criteria
Major	These effects are likely to be key factors or important considerations at a regional or district scale but, if adverse, are potential concerns to the Proposed Development, depending upon the relative importance attached to the issue during the decision-making process. They are generally, but not exclusively, associated with sites and features of national importance and resources/features which are unique and which, if lost, cannot be replaced or relocated.
Moderate	These effects, if adverse, while important at a local scale, are not likely to be key decision-making issues. Nevertheless, the cumulative effect of such issues may lead to an increase in the overall effects on a particular area or on a particular resource.
Minor	These effects may be raised as local issues but are unlikely to be of importance in the decision-making process. Nevertheless, they are of relevance in the detailed design of the Proposed Development.
Negligible	Effects which are beneath levels of perception, within normal bounds of variation or within the margin of forecasting error.

7. Mitigation Measures

7.1.1 This PEIR includes a description of the measures envisaged to avoid and reduce or mitigate adverse effects identified. If necessary, monitoring may also have been prescribed.

7.1.2 In line with ISEP Guidance and professional best practice, consideration will be given to key types of mitigation:

- **Embedded mitigation** – Measures that form part of the engineering design, developed through the iterative design process. The first stage of assessment is undertaken with embedded mitigation in place. A Design and Access Statement will be included with the DCO application which will define the design principles for the Proposed Development to be secured and implemented through the DCO;
- **Good practice** – Standard approaches and actions commonly used or required on infrastructure projects to avoid or reduce environmental impacts, and typically applicable across the whole project regardless of whether an EIA is undertaken or not. Management plans will incorporate standard good practice to be applied during the construction, operation and decommissioning of the Proposed Development and their development and implementation can be secure by Requirement of the DCO. The first stage of assessment is undertaken with good practice in place; and
- **Further mitigation** – Any additional project-specific measures identified during the EIA to avoid, reduce or offset potential impacts that could otherwise result in effects considered significant in the context of the EIA Regulations. Essential mitigation will be identified by environmental aspect specialists, where required, taking into account the embedded mitigation and good practice commitments. The residual effects assessment is undertaken with further mitigation in place.

7.1.3 At this stage, the Proposed Development has been through design development which has identified a number of mitigation measures and design principles that have been embedded into the design and layout of the Proposed Development. In addition, Outline Management Plans will be provided as part of the DCO application, as a mechanism for securing required mitigation measures, and are therefore considered to be embedded or good practice mitigation. This will include the Outline Construction Environmental Management Plan (oCEMP) to be included with the DCO application, which includes practices to manage contractor activities and minimise nuisance effects that the contractor will be obliged to implement. For further details on Outline Management Plans, see below.

8. Other Supporting Studies and Management Plans

8.1 Introduction

8.1.1 The DCO application will be supported by several technical assessments and management plans undertaken in line with specific and relevant policy or legislation. These provide additional information to inform the design, the potential effects of the Proposed Development and any mitigation measures. An outline of these is provided below for information.

8.1.2 For a description of the proposed construction, operation and decommissioning management plans, see Chapter 4 Proposed Development (PEIR Volume 1).

8.2 Habitats Regulations Assessment

8.2.1 The European Habitats Directive was transposed into UK legislation through the Conservation of Habitats and Species Regulations 2017 (the 'Habitats Regulations'). These regulations set out procedures for dealing with the effects of development on the national site network, which comprises Special Areas of Conservation (SACs) and Special Protection Areas (SPAs). These are collectively referred to as the National Site Network, although there are still some references in guidance to, "European sites". As a matter of policy, the Government applies the same procedures to possible SPAs, possible SACs, Ramsar sites and proposed Ramsar sites.

8.2.2 Under Regulation 63 of the Habitats Regulations, an appropriate assessment is required where a plan or project, in this case an NSIP, is likely to have a significant effect upon a National Site, either individually or in combination with other projects. This information takes the form of a report.

8.2.3 Further to this, Regulations 64 and 68 provide that where an appropriate assessment has been carried out and results in a negative assessment, that is, the development will adversely affect the integrity of the site(s) despite any proposed avoidance or mitigation measures or if uncertainty remains, consent can only be granted if there are no alternative solutions, there are Imperative Reasons of Overriding Public Interest (IROPI) for the development, and compensatory measures have been secured.

8.2.4 A Habitat Regulations Assessment (HRA) Appropriate Assessment will be prepared and submitted as part of the DCO application. This will identify

whether significant effects are likely to occur to qualifying habitats and species associated with, for example, the Teesmouth and Cleveland Coast SPA and Ramsar; North York Moors SAC and SPA; Durham Coast SAC; Northumbria Coast SPA and Ramsar

8.3 Water Framework Directive Assessment

8.3.1 The Water Framework Directive (WFD) (2000) was transposed into domestic law by the Water Environment (Water Framework Directive) (England and Wales) Regulations 2003. Post the UK leaving the European Union, these regulations were revoked and replaced by the Water Environment (Water Framework Directive) (England and Wales) Regulations 2017. (the 'WER Regulations'). The WER Regulations provide a structure for the protection and enhancement of surface fresh water, estuaries, coastal waters and groundwater.

8.3.2 The WER Regulations aim to enhance the status of all waterbodies, with a target to achieve Good Ecological Status, and to prevent status deterioration of waterbodies due to pollution. The requirements of the WER Regulations have been taken into account when planning all activities that may impact the water environment.

8.3.3 Chapter 12 Water Resources and Flood Risk (PEIR Volume 1) details all surface water and groundwater receptors located within the study area of the Proposed Development. This includes a description of existing water quality, water quantity and WER status.

8.3.4 A WER Compliance Assessment will be included as an appendix to the Water Resources chapter within the Environmental Statement .

8.4 Flood Risk Assessment

8.4.1 A Preliminary Flood Risk Assessment (FRA) has been undertaken in accordance with the NPPF. The FRA considers flood risk both to and from the Proposed Development. It will demonstrate how this risk is intended to be managed in the future, including with the influence of climate change.

8.4.2 In line with both NPS EN-1 and the NPPF, a Sequential Test will be undertaken in the ES to demonstrate there are no reasonably available sites in areas of lower risk, and that the Proposed Development will be safe for its lifetime without increasing flood risk elsewhere.

8.4.3 The Environment Agency published new national risk information for flooding and coastal erosion (NaFRA) on 25 March 2025, which will be incorporated in the FRA. The FRA will also incorporate planning practice guidance on Flood Risk and Coastal Change (Department for Environment,

Food and Rural Affairs, latest update 17 September 2025).

8.5 Transport Assessment

8.5.1 A Transport Assessment (TA) will be included with the DCO application. This will include the assessment of the surface traffic impacts of the Proposed Development during construction and operational traffic. The assessment will consider local, regional, and national policy context, and consider the impact of construction and operational traffic. This will report their likely impacts on network and junction capacity, and potential to impact on journey times and highways safety.

8.6 Management Plans

8.6.1 A series of outline management plans will also be provided with the DCO application, which are currently expected to include:

- oCEMP;
- Outline Construction Traffic Management Plan;
- Outline Waste Management Plan; and
- Outline Landscape and Biodiversity Management Plan.

9. Monitoring

9.1 Overview

9.1.1 Where relevant, monitoring measures have been identified in each aspect assessment to ensure the ongoing efficacy of measures to mitigate significant effects resulting from the Proposed Development. These measures have been outlined in each aspect chapter of this PEIR (Chapters 8 to 22 of this PEIR Volume 1) and will be secured, where necessary, through the DCO.

10. Cumulative Effects

10.1 Introduction

10.1.1 Schedule 4 of the EIA Regulations, (Regulation 14(2)) require that an ES includes a description of cumulative effects. These effects are typically distinguished into two types:

- In-combination effects from the interrelationship between different environmental effects of the Proposed Development (intra-project); and
- Cumulative effects from the interrelationship between different projects along with the Proposed Development (inter-project).

10.2 In-Combination Effects

10.2.1 In-combination effects, or intra-project effects, occur when a resource, receptor or group of receptors are potentially affected by more than one source of direct environmental impact resulting from the same development. For example, a community may be affected by noise and dust effects resulting from the construction phase activities of a single development.

10.2.2 Where relevant, in-combination effects are considered within each environmental aspect chapter and are collated in Chapter 22 Cumulative and Combined Effects (PEIR Volume 1).

10.3 Cumulative Effects Assessment

10.3.1 Cumulative effects, or inter-project effects, occur when a resource, receptor or group of receptors are potentially affected by more than one development at the same time. For example, the construction traffic effects of a development in isolation may not be significant, but when combined with the construction traffic effects of another development using the same geographical area at the same time may result in significant cumulative effects on the surrounding highway network.

10.3.2 Chapter 22 Cumulative and Combined Effects (PEIR Volume 1) provides an overview of the approach to undertaking the in-combination effects and cumulative effects assessment and the preliminary assessment of cumulative effects.

References

Ref 1 HM Government (2017) Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (SI 2017 No. 572). Available online: https://www.legislation.gov.uk/uksi/2017/572/contents/made

Ref 2 UK Government (2008) Planning Act 2008. Available online: https://www.legislation.gov.uk/ukpga/2008/29/contents

Ref 3 Department for Energy Security and Net Zero (2024) Overarching National Policy Statement (NPS) for Energy (EN-1). Available online: https://www.gov.uk/government/publications/overarching-national-policy-statement-for-energy-en-1

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