



**Net Zero
Teesside**

Net Zero Teesside – Second Environmental Statement - Addendum

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Volume I Main Text and Appendices

The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (as amended)

The Infrastructure Planning (Applications: Prescribed Forms and Procedure Regulations 2009 - Regulation 5(2)(a))



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1. Introduction and Scope of Second Environmental Statement Addendum

1.1 Introduction

Background

- 1.1.1 The Applicants are seeking development consent for the construction, operation and maintenance of the Net Zero Teesside Project ('NZZ'), including associated development (together the 'Proposed Development') on land at and in the vicinity of the former Redcar Steel Works site, Redcar, and on land in Stockton-on-Tees, on Teesside (the 'Site'). The former Redcar Steel Works site is within the landownership of South Tees Development Corporation (STDC).
- 1.1.2 On 19 July 2021, Net Zero Teesside Power Limited and Net Zero North Sea Storage Limited (the 'Applicants') made an application for a Development Consent Order (DCO) under the Planning Act 2008 to the Planning Inspectorate (who considers such applications on behalf of the Secretary of State for Business, Energy and Industrial Strategy) (the 'DCO Application'). The DCO Application was accepted for examination on 16 August 2021.
- 1.1.3 A change request relating to the application (referred to in this document as the First Change Request) was made by the Applicants in April 2022 and was accepted into the Examination by the Examining Authority on 6 May 2022. An addendum to the environmental statement (First ES Addendum) [AS-049 to AS-132] was submitted to assess the effect of the changes on the significance of effects and the conclusion of the submitted original ES [APP-082 to APP-347].
- 1.1.4 The Applicants notified the Examining Authority on 7 July 2022 that they intend to submit a request to make further changes to the Application [REP4-031].
- 1.1.5 There are four changes proposed, some of which result in changes to the Order Limits as described in the Applicants' notification of further proposed changes and update on remaining optionality report (the 'Change Notification and Optionality Report' [REP4-031]). The Applicants are now submitting a formal change request application referred to as the 'Second Change Request'.
- 1.1.6 The changes have been numbered sequentially carrying on from the First Change Request, resulting in the changes referenced in this report being referred to as changes 14, 15, 16 and 17.
- 1.1.7 The Proposed Development Changes relate solely to reductions in the Order Limits and removal of optionality for Work Nos. 3, 6, 9 and 10.



- 1.1.8 As the changes relate to removal of optionality (and which had already been addressed in various submissions) and reductions in Order limits, consultation has been carried out via liaison with affected landowners as noted in the Change Notification and Optionality Report. The Applicants also note that the optionality for Work No. 6 was subject to previous non-statutory consultation and following acceptance of the Applicants' previous changes, interested parties have had the opportunity to make representations on the Work No. 6 options.
- 1.1.9 This Second ES Addendum is provided in support of the Second Change Application that is now being submitted to the Examining Authority.

Purpose of this document

- 1.1.10 The proposed development is described in the original Environmental Statement [APP-082 to APP-347] submitted as part of the DCO Application (hereafter referred to as the 'Original ES') and the First ES Addendum [AS-049 – AS 132]. This Second ES Addendum considers if any of the proposed additional changes will alter the scope and conclusions of the Original ES and the First ES Addendum.
- 1.1.11 This Second ES Addendum should be read in conjunction with the Original ES and the First ES Addendum. This document also identifies where the Second ES Addendum text supersedes the First ES Addendum or the Original ES text.
- 1.1.12 This Second ES Addendum only considers how the Proposed Development Changes affect the assessments presented as part of the Original ES and First ES Addendum. This Second ES Addendum does not consider changes in legislation or baseline conditions and if there are no materially different effects, i.e. if no significant change to an assessment is presented as part of the Second ES Addendum, then conditions are the same as those listed in the Original ES and the First ES Addendum.
- 1.1.13 Whilst the Proposed Development Changes are described as changes (primarily reductions) to the extent of the Order Limits, the driver for those changes is refinements to the extent of works required in connection with the Proposed Development. As it is the changes to extent of works that triggers potential changes to the environmental effects reported on in the Original ES and the First ES Addendum, this Second ES Addendum assesses the impact of the modifications to the extent of works by reference to Work Numbers.

1.2 Scope and methodology of the ES Addendum

Overview

- 1.2.1 Throughout this Second ES Addendum, references are given to the Examination Library numbers assigned by the Examining Authority (identified within square brackets, e.g. [APP-043] for information previously accepted for examination and to the Applicant's document numbers ('Application Document Ref.' numbers) for documents which have yet to be assigned an Examination Library number by the Examining Authority.



- 1.2.2 A glossary of terms and list of abbreviations used in this Second ES Addendum is provided within the original ES Vol I Cover and Contents [**APP-082**].
- 1.2.3 The general assessment methodology and topic-specific methodologies, relevant legislation, policy and guidance, key assumptions and limitations set out in Original ES (specifically Chapter 2 Assessment Methodology submitted with the DCO Application [**APP-084**]) remain unchanged unless specifically stated in this Second ES Addendum.

1.3 Structure of this ES Addendum

- 1.3.1 This ES Addendum comprises of two volumes:
- Second ES Addendum Volume I (this document) - describes the modifications to the extent of Work Numbers which have triggered the Proposed Development Changes and outlines whether the changes affect the original ES technical chapters and appendices [**APP-084 to APP-107** and **APP-237 to APP-348**] and original ES figures [**APP-109 to APP-236**] submitted with the DCO Application or where relevant those considered in the First ES Addendum; and
 - Second ES Addendum Volume II (Document Ref. 7.11.2) - provides updated ES figures.
- 1.3.2 This Second ES Addendum is also accompanied by an ES Addendum Non-Technical Summary (NTS) (Document Ref. 7.10) which provides a summary of the key findings from the ES Addendum in non-technical language. The ES Addendum NTS provides an update to the NTS submitted with the DCO Application [**APP-081**]

2. Proposed Development Changes

2.1 Introduction

2.1.1 This chapter of the Second ES Addendum presents a description of the Proposed Development Changes and evaluates how the change in area of the relevant Work Numbers modifies the description of the Proposed Development and the assessment outcomes as presented in the Original ES and First ES Addendum.

2.2 Evaluation of Proposed Development Changes

2.2.1 Since the submission of the First ES Addendum, four changes to the Order Limits have been identified through continued engagement with Interested Parties with a view to addressing comments and agreeing common ground, while also continuing with pre-FEED work. The Applicants informed the Examining Authority of the proposed changes in the Change Notification and Optionality Report [REP4-031].

2.2.2 Each of the changes have resulted in changes in the area of the Work Numbers for the Proposed Development, which are presented in Schedule 1 of the draft DCO.

2.2.3 Each of the modifications to Work Numbers associated with the Proposed Development Changes is explained below. Where necessary, Section 3 of this document provides an explanation of how chapters of the Original ES and First ES Addendum would change as a result of the Proposed Development Changes if the description of the Proposed Development has changed as a result.

2.2.4 An updated Site Location Plan is presented as Figure 1.1 of ES Addendum Volume II (Document Ref. 7.11.2). The Order Limits are presented in Figure 3.1 and Figure 3.2 of the ES Addendum Volume II (Document Ref. 7.11.2).

Change 14 - Removal of Optionality for the CO₂ Gathering Network (Work Nos. 6 and 9B)

2.2.5 Change 14 involves the removal of optionality for the CO₂ Gathering Network by dropping the Horizontal Directionally Drilled (HDD) crossing of the Tees. The change will mean that there will be no requirement for:

- an HDD launch point on the north bank of the Dabholm Gut and close to Bran Sands Lagoon;
- an HDD receiving pit at North Tees; and
- stringing of the CO₂ Gathering Network pipeline through North Tees, and across and along the northern side of Seal Sands Road.

2.2.6 This change will therefore remove the more significant construction works associated with the CO₂ Gathering Network on the north bank of the Dabholm Gut. It also removes the need to manage traffic on Seal Sands Road. Both of these are associated with HDD drilling and pipe stringing operations.



Change 15 - Removal of optionality for the Electrical Connection (Work No. 3A)

- 2.2.7 Change 15 will remove the option of construction of Option 1A for the Electrical Connection, using the York Potash conveyor crossing of the Tees Valley line.

Change 16 - Removal of Parcels of Land from North Tees Land Limited land (Work No. 6)

- 2.2.8 Change 16 involves the removal of a number of parcels of North Tees Land Ltd, which are no longer required for Work No. 6.

Change 17 - Removal of Parcels of Land from STDC land (Work No. 9A)

- 2.2.9 Change 17 results in the removal of a number of parcels of STDC land from the Order Limits which are no longer required for construction laydown (Work No. 9A) including areas of construction laydown and areas to facilitate pipeline stringing.

3. Changes to the Original Environmental Statement

3.1 Introduction

3.1.1 This chapter of the Second ES Addendum describes any changes in the introductory chapters of the Original ES required as a result of the modifications to the extent of works associated with the Proposed Development Changes. Other than these changes, the Original ES text remains valid.

3.2 Changes to Chapters 1-7 of the Original ES

Chapter 1 – Introduction

3.2.1 The general background to the DCO Application and the general description of the Proposed Development remains as described following the Second Proposed Development Changes and no changes are therefore required to **Chapter 1: Introduction [APP-083]** of the Original ES.

Chapter 2 – Methodology

3.2.2 The general assessment methodology and topic-specific methodologies, relevant legislation, policy and guidance, key assumptions and limitations set out in **Chapter 2: Assessment Methodology [APP-084]** remain unchanged so far as relevant to the Second Proposed Development Changes. No further changes are proposed.

Chapter 3 – Description of the Existing Environment

3.2.3 The overall description of the Proposed Development site set out in **Chapter 3: Site Description of the Existing Environment [APP-085]** remains unchanged and there have been either no increases or slight reductions in the distances measured between the Order Limits and receptors as a result of the Proposed Development Changes.

3.2.4 The Proposed Development Changes reduce the Order Limits such that the area of the Site has been reduced from 304 ha to 267ha.

Chapter 4 – Proposed Development

3.2.5 The CO₂ Gathering Network section of Chapter 4 has been updated to reflect the changes proposed (specifically Change 14, Work No. 6). Paragraph 4.3.40 has been updated to reflect the changes and a bullet point has been added to the section. The following table compares the First ES Addendum text with the replacement text to describe the change.

First ES Addendum text for paragraph 4.3.40

Replacement text for paragraph 4.3.40

<p>The routing of the CO₂ Gathering Network across the River Tees will be either:</p> <ul style="list-style-type: none"> • installed using a horizontal directional drilled (HDD) bore drilled from a location on land on the north bank of Dabholm Gut to land near to Navigator Terminals on North Tees (Option 2); • construction of the pipeline within the existing Sembcorp No. 2 Tunnel from Navigator Terminals to the northern bank of the mouth of Dabholm Gut (Option 3); • The pipeline will then run above ground along the northern bank of Dabholm Gut past Bran Sands Wastewater Treatment Plant and then north to the PCC Site (see Figure 5-2, First ES Addendum Volume II (Document Ref. 7.11.2)). 	<p>The routing of the CO₂ Gathering Network across the River Tees will involve:</p> <ul style="list-style-type: none"> • the construction of the pipeline within the existing Sembcorp No. 2 Tunnel from Navigator Terminals to the northern bank of the mouth of Dabholm Gut (Option 3); • The pipeline will then run above ground along the northern bank of Dabholm Gut past Bran Sands Wastewater Treatment Plant and then north to the PCC Site (see Figure 5-2, Second ES Addendum Volume II (Document Ref. 7.8.2 Rev 2)).
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3.2.6 The Electrical Connection section of Chapter 4 has been updated to reflect the changes proposed. Paragraph 4.3.67 have been updated in the original ES to reflect the changes made to Work No. 3A, to reflect Change 15.

Original ES text for paragraph 4.3.66 & 4.67 **Updated text for paragraph 4.3.66 & 4.67**

<p>Two possible routeings for the Electrical Connection (1A and 1B) are shown on Figure 5-3 (ES Volume II, Document Ref. 6.3) and the Electrical Connection Plans (Document Ref. 4.8). These two options only relate to the routing of the cables across part of the Teesworks site and crossing the rail line and are due to uncertainty in the timing and exact location of third party infrastructure being developed in this part of the Site by the site operator and the York Potash project. This infrastructure will be used to facilitate the crossing of the Tees Valley railway line by the Electrical Connection for the Proposed Development.</p> <p>The remainder of the corridor for the Electrical Connection is broad in parts</p>	<p>The Electrical Connection runs from Tod Point to the PCC site in Teesworks land and will cross the Tees Valley railway line using the existing road bridge.</p> <p>The remainder of the corridor for the Electrical Connection is broad in parts due to the fact that the site is the subject of development proposals being progressed by Teesworks which are still being designed in detail, and the Electrical Connection routing needs to be flexible to fit with the development that actually comes forward.</p>
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<p>due to the fact that the site is the subject of separate development proposals being progressed by Teesworks and York Potash which are still being designed in detail, and the Electrical Connection routeing needs to be flexible to fit with the development that actually comes forward.</p>	
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3.2.7 There is no change to Chapter 4 because of Change 16, as Change 16 will result in the removal of parcels of land from North Tees Land Limited land as they are no longer necessary following landowner discussion and technical assessment (Work No. 6).

There is no change to Chapter 4 because of Change 17, as Change 17 will result in the removal of parcels of land from STDC land as they are no longer necessary following landowner discussions and technical assessment.

Chapter 5 – Construction Programme and Management

The sections on the construction of the CO₂ Gathering Network have been changed, and the following tables identify updates to the relevant paragraphs.

Replacement text for paragraph 5.3.65 in the First ES Addendum

Updated replacement text for paragraph 5.3.65

<p>The CO₂ Gathering Network pipeline (and associated fibre-optic control cable) will need to cross the River Tees using either the existing Sembcorp No. 2 Tunnel (Option 3) or using a direct crossing from Navigator Terminals to the northern bank of the Dabholm Gut constructed using trenchless technologies (HDD) (Option 2) (see Box 5-1). The fibre-optic control cable will be installed using either the existing Sembcorp No. 2 Tunnel or within the HDD bore.</p>	<p>The CO₂ Gathering Network pipeline (and associated fibre-optic control cable) will cross the River Tees using the existing Sembcorp No. 2 Tunnel.</p>
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3.2.8 Paragraph 5.3.67 in the First ES Addendum has been updated to state “The alternative trenchless crossing of the Tees will be constructed using HDD techniques, with the fibre-optic control cable installed within the Sembcorp No. 2 Tunnel under the Tees”, to reflect Change 14 (Work No. 6 and 9B).

3.2.9 **Table 5-8** (Special Crossings on the CO₂ Gathering Network) has been updated to remove references to HDD crossing by HDD Bore (Change 14, Work No.6 and 9B).

Table 3-1. Special Crossings on the CO₂ Gathering Network

Crossing Name	Grid Reference	Description	Type	Existing/ Upgraded/ New
North Tees (Seal Sands to Navigator Terminals)				
CG1	447817, 522753	Rail (industrial)	Pipe bridge	Existing
CG2	447830, 522840	Rail (industrial)	Pipe bridge	Existing
CG3	447849, 522927	Road (Belasis Ave)	Culvert	Existing
CG4	448137, 523106	Road (Nelson Ave)	Culvert	Existing
CG5	448444, 523338	Road (Cowpen Bewley Rd)	Culvert	Existing
CG6	448947, 523545	Farm Track	Culvert	Existing
CG7	449578, 523559	Farm Track	Culvert	Existing
CG8	449935, 523567	Minor watercourse	Pipe bridge	Existing
CG9	450180, 523572	Farm Track	Culvert	Existing
CG10	450437, 523578	Farm Track	Culvert	Existing
CG11	450662, 523559	Minor Road (Seaton Carew Rd)	Culvert	Existing
CG12	451035, 523583	Minor Road (Seal Sands)	Culvert	Existing
CG13	451076, 523585	Minor Road (Seal Sands)	Pipe bridge	Existing
CG14	452475, 523589	Minor Road (Seal Sands)	Pipe bridge	Existing
CG15	453489, 523450	Minor Road (Seal Sands)	Pipe bridge	Existing
CG16	453597, 523627	Minor Road (Seal Sands)	Pipe bridge	Existing
CG17	453598, 523762	Minor Road (Seal Sands)	Pipe bridge	Existing
CG18	453681, 524208	Minor Road	Pipe bridge	Existing
CG19	453766, 524337	Minor Road	Pipe bridge	Existing
CG20	453886, 524519	Minor Road	Pipe bridge	Existing
CG21	453946, 524719	Minor Road (Navigator Terminals)	Pipe bridge	Existing
Tees Crossing using Sembcorp No. 2 Tunnel				
CGC24	454686, 524771	River Tees	Tunnel	Existing
Dabholm Gut to PCC Site				
CGC25	455196, 524652	Minor Road (Dabholm Gut)	Pipe bridge	Existing
CGC26	455380, 524552	Minor Road (Dabholm Gut)	Pipe bridge	Existing
CGC27	455562, 524447	Minor Road (Dabholm Gut)	Pipe bridge	Existing
CGC28	455801, 524301	Minor Road (Dabholm Gut)	Pipe bridge	Existing
CGC29	455885, 524240	Minor Road (Dabholm Gut)	Pipe bridge	Existing
CGC30	456193, 524116	Minor Road (Dabholm Gut)	Pipe bridge	Existing
CGC31	456540, 523836	Minor Road (Dabholm Gut)	Under road bridge	Existing
CGC32	456695, 523763	Minor Road (Dabholm Gut)	Pipe bridge	Existing

Crossing Name	Grid Reference	Description	Type	Existing/ Upgraded/ New
CGC33	457016, 524316	Rail (x2) (Industrial)	Pipe bridge	Existing
CGC34	457098, 524604	Minor Road (Teesworks)	Auger bore	New

3.2.10 There are no direct references in Chapter 5 to parcels of land owned by North Tees Land Limited or STDC, so there is no requirement to update Chapter 5 regarding Changes 16 and 17 (Work Nos. 6 and 9A) respectively.

Chapter 6 – Alternatives and Design Evolution

3.2.11 An additional table (**Table 6.2**) (Summary of design changes and a comparison of environmental effects between ES submission and the Change Notification) has been updated to describe the Second Proposed Development Changes (see below).

Table 6-2. Proposed Development Changes between DCO Submission and Examination

Change	Reason for Change	Changes in Environmental Effects
14	Refined based on further consultation with Sembcorp.	Environmental effects are the same or lower than assessed at DCO Submission based on the use of existing infrastructure rather than the impacts of the construction of a new HDD route.
15	Refined based on further consultation with STDC.	Environmental effects are the same or lower than assessed at DCO Submission based on the reduced land take of the construction corridors and therefore increased distances to sensitive receptors.
16	Refined based on further consultation with North Tees Land Limited.	Environmental effects are the same or lower than assessed at DCO Submission based on the reduced land take of the construction corridors and therefore increased distances to sensitive receptors.
17	Refined based on further consultation with STDC	Environmental effects are the same or lower than assessed at DCO Submission based on the reduced land take of the construction corridors and therefore increased distances to sensitive receptors.

Chapter 7 - Legislation and Policy

- 3.2.12 None of the changes reported on in this Addendum have been driven by legislative changes in national, regional or local policy. As a result, Chapter 7: Legislative Context and Planning Policy [**APP-089**] has not been updated.

4. Environmental Assessment of Proposed Development Changes

4.1 Introduction

4.1.1 This chapter of the Second ES Addendum identifies where the Proposed Development Changes have the potential to modify the assessment of impacts and effects reported in the technical chapters of the original ES and the First ES Addendum.

4.2 Scope and methodology for the assessment of the proposed changes

4.2.1 A preliminary environmental assessment (screening) of whether the changes proposed would change the baseline or alter the outcomes of the previous assessments presented within ES Volume I, II and III of the ES [**APP-082-APP-348**] and within Appendices of the First ES Addendum [**AS-050**] has been completed.

4.2.2 An update to the Habitats Regulations Assessment (HRA) Appropriate Assessment (Document Ref. 5.13 Rev. 2.0) also forms part of the submission in support of the Second Change Application.

4.2.3 The results of the screening assessment are presented in Table 4-1.

Table 4-1: Net Zero Teesside screening of environmental assessments for Proposed Development Changes

ES Chapter	Screening Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes	ES Appendix	Screening Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes
Chapter 8 Air Quality [APP-090]	Out	None of the changes will result in modifications to the impacts previously assessed during the construction, operational or decommissioning stages.	8A Air Quality - Construction Phase [APP-247]	Out	None of the changes will result in a change in the baseline conditions at construction stage. The removal of the HDD option has reduced the potential for dust generation but does not change the assessment which has already been made in the chapter and no change is proposed.
			8B Air Quality - Operation Phase [APP-248]	Out	None of the changes have the potential to change the outcomes of this assessment/appendix because the changes do not affect the PCC Site and the operational emissions associated with this.
			8C Air Quality - Amine Degradation Assessment [APP-249]	Out	None of the changes have the potential to change the outcomes of this appendix because the changes will not affect the solvents proposed in the application.

ES Chapter	Screening Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes	ES Appendix	Screening Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes
Chapter 9 Surface Water, Flood Risk and Water Resources [APP-091]	Out	None of the changes will result in modifications to the impacts previously assessed during the assessment and because the changes will not affect the implementation of mitigation measures during construction or alter the nature or volume of discharges during operation.	9A Flood Risk Assessment [APP-250 to APP-252]	Out	None of the changes have the potential to change the conclusions of this assessment because the changes predominantly involve no change to the development options assessed in the original ES.
			9B Background Water Quality [APP-253]	Out	None of the changes have the potential to change the outcomes of this appendix because the changes will not affect the previous water quality monitoring data or details of existing third-party discharge and abstraction permits.

ES Chapter	Screening Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes	ES Appendix	Screening Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes
			9C WFD Assessment [APP-254]	Out	None of the changes have the potential to change the outcomes of this assessment because the changes involve the reduction of the Order Limits and will not affect the implementation of mitigation measures during construction or alter the nature or volume of discharges during operation.
Chapter 10 Geology and Contaminated Land [APP-092]	Out	None of the changes will result in modifications to the impacts previously assessed and will not affect the implementation of mitigation measures during construction or operation of the Proposed Development.	10A Preliminary Sources Study Report [APP-255 to APP-292]	Out	None of the changes have the potential to change the outcomes of this appendix, because the changes do not affect the baseline, which includes historical mapping.
			10B Contaminated Land-Conceptual Site Model [APP-293]	Out	None of the changes have the potential to change the outcomes of this appendix, because the changes do not affect the identification of sources, pathways and receptors.

ES Chapter	Screening Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes	ES Appendix	Screening Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes
			10C Contaminated Land Environmental Risk Assessment [APP-294]	Out	None of the changes have the potential to change the outcomes of this appendix, because the changes do not affect the proposed mitigation measures.
			10D Geotechnical Risk Register [APP-295]	Out	None of the changes have the potential to change the outcomes of this appendix, because the changes do not affect the geotechnical risks assessed.
Chapter 11 Noise and Vibration [APP-093]	In	The changes have been reviewed and do not change the outcomes of the assessment, because distances between noisy activities and noise sensitive receptors is increased, therefore meaning that construction noise predictions are lower. No significant effects were previously predicted and this remains the case.	11A Construction Noise Assessment Methodology [APP-296]	Out	None of the changes have the potential to change the outcomes of this appendix, because the changes do not affect the methodology or data used for the construction noise assessment.
			11B Operational Noise Information [APP-297]	Out	None of the changes have the potential to change the outcomes of this appendix, because the changes do not affect the methodology or data used for the operational noise assessment.

ES Chapter	Screening Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes	ES Appendix	Screening Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes
			First ES Addendum Appendix A Noise [AS-050]	Out	None of the changes have the potential to change the outcomes of this appendix, because the changes do not affect the results of the assessment presented.
Chapter 12 Terrestrial Ecology [APP-094]	Out	None of the changes will result in modifications to the impacts previously assessed during the at construction, operational or decommissioning stages, therefore they do not change the assessment of effects on designated sites or protected species.	12A Legislation and Planning Policy Relevant to Ecology [APP-298]	Out	None of the changes will update or change the contents of the appendix.
			12B Ecological Impact Assessment Methods [APP-299]	Out	None of the changes have the potential to change the outcomes of this appendix, because the changes do not affect the methodology or data used for the ecological assessment.
			12C Preliminary Ecological Appraisal [APP-300 to APP-304]	Out	None of the changes have the potential to change the outcomes of this appendix.
			12D Bat Survey Report [APP-305 to APP-306]	Out	None of the changes have the potential to change the outcomes of this appendix.

ES Chapter	Screening Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes	ES Appendix	Screening Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes
			12E Reptile Survey Report [APP-307]	Out	None of the changes have the potential to change the outcomes of this appendix.
			12F Terrestrial Invertebrate Survey Report [APP-308]	Out	None of the changes have the potential to change the outcomes of this appendix, because the changes predominately involve the reduction of the Order Limits.
			12G Water Vole and Otter Survey Report [APP-309]	Out	None of the changes have the potential to change the outcomes of this appendix, because the changes predominately involve the reduction of the Order Limits.
			12H Supplementary Habitat Information Report Coatham Sands [APP-310 to APP-311]	Out	None of the changes have the potential to change the outcomes of this appendix, which includes baseline ecological data for a wider area of Coatham Sands outside of the Order Limits and is therefore not affected by the changes.

ES Chapter	Screening Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes	ES Appendix	Screening Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes
			12I Terrestrial Invertebrate Survey Coatham Dunes [APP-312]	Out	None of the changes have the potential to change the outcomes of this appendix, because the changes will not affect this baseline ecological data for Coatham Sands.
			12J GCN Report [APP-313]	Out	None of the changes have the potential to change the outcomes of this appendix, because the changes involve the reduction of the Order Limits.
Chapter 13 Aquatic Ecology [APP-095]	Out	None of the changes will result in modifications to the impacts previously assessed during the construction, operational or decommissioning stages, therefore they do not change the assessment of effects on aquatic ecology.	13A Aquatic Ecology Supplementary Desk Study and Field Survey Report [APP-314]	Out	None of the changes have the potential to change the outcomes of this appendix, because this appendix was already based on an earlier version of the Order Limits.

ES Chapter	Screening Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes	ES Appendix	Screening Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes
Chapter 14 Marine Ecology [APP-096]	Out	None of the changes will result in modifications to the impacts previously assessed during the construction, operational or decommissioning stages, therefore they do not change the assessment of effects on marine ecology.	14A Intertidal Benthic Ecology Survey Report [APP-315]	Out	None of the changes have the potential to change the outcomes of this appendix, which includes baseline benthic ecological data for a wider part of the intertidal area than the Order Limits and is therefore not affected by the changes.
			14B Fisheries and Fish Ecology Baseline [APP-316 to APP-318]	Out	None of the changes have the potential to change the outcomes of this appendix, which includes baseline fisheries and fish ecological data for a 10km study area that is wider than the Order Limits and is therefore not affected by the changes.
			14C Marine Mammal Baseline [APP-319]	Out	None of the changes have the potential to change the outcomes of this appendix, which includes baseline marine mammal ecological data for a 10km study area that is wider than the Order Limits and is therefore not affected by the changes.

ES Chapter	Screening Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes	ES Appendix	Screening Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes
			14D Subtidal Benthic Ecology [APP-320]	Out	None of the changes have the potential to change the outcomes of this appendix, which includes baseline benthic ecological data for a wider part of the subtidal area than the Order Limits and is therefore not affected by the changes.
			14E Coastal Modelling Report [APP-321]	Out	None of the changes affect the baseline or findings of the Appendix.
Chapter 15 Ornithology [APP-097]	In	The changes have been reviewed and do not change the outcomes of the assessment, because the changes increase the distances between noisy activities and noise sensitive receptors.	15A Ornithology Baseline [APP-322 to APP-325]	Out	None of the changes have the potential to change the outcomes of this appendix, which is a baseline report that covered an area larger than the Order Limits and is therefore not affected by the changes.

ES Chapter	Screening Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes	ES Appendix	Screening Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes
		<p>Note: The Habitats Regulations Assessment Report has also been updated (Document Ref. 5.13 Rev. 2.0) and has confirmed that with mitigation the effect on individual species and on the SPA / Ramsar and SSSI would be no noise disturbance to SPA/Ramsar birds and no adverse effects on the integrity of the SPA/Ramsar.</p>	<p>15B CONFIDENTIAL Ornithology Baseline [APP-326]</p>	<p>Out</p>	<p>None of the changes have the potential to change the outcomes of this appendix, which is a baseline report that covered an area larger than the Order Limits and is therefore not affected by the changes.</p>
			<p>First ES Addendum Appendix B Ornithology [AS-050]</p>	<p>Out</p>	<p>Change 15 will result in a neutral effect as it will remove the construction of the electricity connection along the York Potash conveyor crossing of the Tees Valley line, which will be constructed along an existing bridge within Teesworks Land. This is an option already assessed</p>

ES Chapter	Screening Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes	ES Appendix	Screening Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes
Chapter 16 Traffic [APP-098]	Out	None of the changes will result in modifications to the impacts previously assessed during the construction, operational or decommissioning stages, therefore they do not change the assessment of effects on traffic. The changes proposed do not affect peak construction traffic numbers assessed.	16A Transportation Assessment [APP-327 to APP-332]	None of the changes have the potential to change the outcomes of this appendix, because the changes proposed will not affect peak construction traffic.	
			16B Framework Construction Worker Travel Plan [APP-333]	None of the changes have the potential to change the outcomes of this appendix, because the changes proposed affect the deployment of measures in the travel plan.	
			16C Framework Traffic Management Plan [APP-334]	None of the changes have the potential to change the outcomes of this appendix, because the changes proposed affect how traffic management takes place.	

ES Chapter	Screening Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes	ES Appendix	Screening Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes
Chapter 17 Landscape and Visual Amenity [APP-099]	Out	None of the changes will result in in modifications to the impacts previously assessed during the construction, operational or decommissioning stages, therefore they do not change the assessment of effects on landscape and visual amenity.	17A Landscape Character [APP-335]	Out	None of the changes have the potential to change the outcomes of this appendix, which includes baseline information on landscape character for a study area that is wider than the Order Limits and is therefore not affected by the changes
			17B LVIA Proposed Methodology [APP-336]	Out	None of the changes have the potential to change the outcomes of this appendix, because the changes do not affect the methodology used for the landscape and visual assessment.
			17C Potential Viewpoints [APP-337]	Out	None of the changes will result in a change in the baseline conditions at construction, operational or decommissioning stages, therefore they do not change the proposed viewpoints used in the landscape and visual impact assessment.

ES Chapter	Screening Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes	ES Appendix	Screening Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes
Chapter 18 Cultural Heritage [APP-100]	Out	None of the changes will result in a in modifications to the impacts previously assessed during the construction, operational or decommissioning stages, therefore they do not change the assessment of effects on cultural heritage.	18A Cultural Heritage Baseline Report [APP-338]	Out	None of the changes have the potential to change the outcomes of this appendix, because the changes do not affect the heritage baseline.
			18B Cultural Heritage Gazetter [APP-339]	Out	None of the changes have the potential to change the outcomes of this appendix, because the changes do not affect the heritage baseline.
Chapter 19 Marine Heritage [APP-101]	Out	None of the changes will result in in modifications to the impacts previously assessed during the construction, operational or decommissioning stages, therefore they do not change the assessment of effects on marine heritage.			
Chapter 20 Socio-Economics [APP-102]	Out	None of the changes will result in in modifications to the impacts previously assessed during the construction, operational or decommissioning stages, therefore they do	20A Economics Benefits Report [APP-340]	Out	None of the changes have the potential to change the outcomes of this appendix, because the changes do not affect the economics benefits of the Proposed Development.

ES Chapter	Screening Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes	ES Appendix	Screening Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes
		not change the assessment of effects on socio-economics.	20B- Navigational Risk Assessment [APP-341 to APP-343]	Out	None of the changes have the potential to change the outcomes of this appendix, because the replacement outfall extents remain the same and this is that was identified as requiring a vessel exclusion zone.
Chapter 21 Climate Change [APP-103]	Out	None of the changes will result in modifications to the impacts previously assessed during the construction, operational or decommissioning stages, therefore they do not change the assessment of effects on climate change.			
Chapter 22 Major Accidents and Disasters [APP-104]	Out	None of the changes will result in updates to the Major Accidents and Disasters assessment made for the construction, operation or decommissioning of the Proposed Development.			

ES Chapter	Screening Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes	ES Appendix	Screening Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes
ES Addendum [AS-050]	Out	None of the changes will result in updates to the Major Accidents and Disasters assessment made for the construction, operation or decommissioning of the Proposed Development.			
Chapter 23 Public Health [APP-105]	Out	None of the changes will result in in modifications to the impacts previously assessed during the construction, operational or decommissioning stages, therefore they do not change the assessment of effects on public health.			

ES Chapter	Screening Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes	ES Appendix	Screening Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes
Chapter 24 Cumulative and Combined Effects [APP-106]	Out	None of the changes proposed will result in changes to the already assessed cumulative and combined effects	24A Planned Development and Development Allocations [APP-344]	Out	Based on the review of the technical chapters presented above, none of the changes have the potential to change the outcomes of this appendix, because the changes do not materially affect the Proposed Development's Zone of Influence and therefore the cumulative schemes listed in this appendix.
			24B Assessment of Cumulative Effects Stages 1-3 [APP-345]	Out	Based on the review of the technical chapters presented above, none of the changes have the potential to change the outcomes of this appendix, because the changes do not materially affect the Proposed Development's Zone of Influence and therefore the cumulative schemes listed in this appendix and scoped in or out of the cumulates assessment.

ES Chapter	Screening Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes	ES Appendix	Screening Decision	Rationale - potential for the environmental effects to be altered as a result of Proposed Development Changes
			24C Statement of Combined Effects [APP-346]	Out	Based on the review of technical chapters presented above, none of the changes have the potential to change the environmental effects or mitigation measures associated with the Proposed Development, therefore the potential for combined effects remains as stated within this appendix.
Chapter 25 Summary of Significant Effects [APP-107]	Out	None of the changes result in changes to significance of effects in the chapters which have been updated as a result of the changes.	25A Commitments Register [APP-347]	Out	None of the changes alter the outcomes of this appendix, because the changes do not require any new or different mitigation measures.



- 4.2.4 The screening assessment has identified that the Proposed Changes will not affect the significance of effects predicted for Air Quality, Surface Water, Flood Risk and Water Resources, Geology and Contaminated Land, Noise and Vibration, Terrestrial Ecology, Ornithology, Aquatic Ecology, Marine Ecology, Traffic, Landscape and Visual Amenity, Marine Heritage, Socio-Economic, Climate Change, Major Accidents and Natural Disasters, Public Health, Cumulative and Combined Effects and the Summary of Significant Effects chapters. No topics are therefore screened in for further consideration.

5. Summary

- 5.1.1 This Second ES Addendum has identified how the Proposed Development Changes affect the content, scope and conclusions of the Original ES [APP-082 to APP-347] submitted as part of the DCO Application and the First ES Addendum [AS-049 to AS-132], submitted in response to the change request made in April 2022.
- 5.1.2 None of the Second Proposed Development Changes will result in updates to the Original ES or further assessments made as part of the First ES Addendum [AS-049 to AS-132]. However, Changes 14 and 15 have resulted in amendments to Chapters 3. (Description of the Existing Environment), 4. (Proposed Development), 5. (Construction Programme and Management) and 6. (Alternatives). These changes are included in this document.
- 5.1.3 Change 14 has resulted in a reduction in optionality for the crossing of the Tees by the CO₂ Gathering Network using the Sembcorp tunnel only. Change 15 has resulted in the removal of construction of the Electrical Connection across the Tees Valley Railway Line using the York Potash conveyor. There are, however, no changes to the significance of effects predicted in the original ES which formed part of the DCO Application arising from Changes 14 and 15.
- 5.1.4 Changes 16 and 17 result in reduction in land take, which does not change the results of assessments in the Original ES and First ES Addendum.