

# Net Zero Teesside Project

Planning Inspectorate Reference: EN010103

Land at and in the vicinity of the former Redcar Steel Works site, Redcar and in Stockton-on-Tees, Teesside

The Net Zero Teesside Order

Document Reference: 5.13a Habitat Regulations Assessment Addendum

Conservation of Habitats and Species Regulations 2017 (as amended)

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



Applicants: Net Zero Teesside Power Limited (NZN Power Ltd) & Net Zero North Sea Storage Limited (NZNS Storage Ltd)

Date: March 2025

## Table of Contents

1. Introduction and Scope of DCO Habitats Regulations Addendum .....	2
1.1 Introduction.....	2
1.2 Scope and methodology of the HRA Addendum.....	4
2. Proposed Development Changes .....	5
2.1 Introduction.....	5
2.2 Evaluation of Proposed Development Changes .....	5
3. Assessment of Proposed Development Changes.....	7
3.1 Introduction.....	7
3.2 Scope and methodology for the assessment of the proposed development changes .....	7
4. In Combination Assessment.....	40
4.1 Introduction.....	40
4.2 Scope and Methodology .....	40
4.3 Changes to the Original HRA (as amended) .....	40
4.4 In Combination Assessment of the Proposed Development Changes in Isolation.....	42
4.5 Residual Effects and Conclusions .....	42
5. Summary.....	43

## Tables

Table 3-1: Summary of Any Potential Changes in LSEs Screening or Appropriate Assessment compared to Original HRA and its addenda for Change 1 – Work No. 6A (New AGI) & Work No. 9G (Temporary Construction Laydown Area for AGI).....	8
Table 3-2: Summary of Any Potential Changes in LSEs Screening or Appropriate Assessment compared to Original HRA for Change 2 – Work No. 2B (AGI Area Extension) .....	16
Table 3-3: Summary of Any Potential Changes in LSEs Screening or Appropriate Assessment compared to Original HRA for Change 3 - Work No. 6 (PCC CO2 Gathering Network Realignment) & Work No 6A (PCC Site CO2 AGI) .....	24
Table 3-4: Summary of Any Potential Changes in LSEs Screening or Appropriate Assessment compared to Original HRA for Change 4 – Work No. 3A (Additional HV cabling areas).....	32



# 1. Introduction and Scope of DCO Habitats Regulations Addendum

## 1.1 Introduction

### Background

- 1.1.1 On 16 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 (PINS) (who considers such applications on behalf of the Secretary of State for Energy Security and Net Zero (DESNZ) (the 'DCO Application'). The DCO Application was accepted for examination on 16 August 2021.
- 1.1.2 The DCO Application was for development consent for the construction, operation and maintenance of the Net Zero Teesside Project ('NZE'), 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 South Tees Development Corporation (STDC).
- 1.1.3 On 16<sup>th</sup> February 2024, the Secretary of State for DESNZ granted development consent for the DCO Application. Accordingly, the Net Zero Teesside Order 2024 was made on 16 February 2024 and came into force on 11 March 2024 (the 'Order').
- 1.1.4 The proposed non-material change to the Order proposes the following changes (together 'the Proposed Development Changes') to 'Schedule 1 – Authorised Development' of the Order:
- 1.1.5 Change 1 - The addition of 'Work No 6A' which would comprise an Above Ground Installation (or 'AGI') for the CO<sub>2</sub> gathering network and associated apparatus to be located at Seal Sands and the addition of 'Work No 9G' consisting of a temporary construction laydown area to be located on land adjacent to the new AGI at Work No. 6A. The proposed AGI under Work No 6A is located within the Order Limits, with the proposed temporary laydown area requiring new land to be included within the Order Limits. The temporary laydown is needed to facilitate the construction of the Proposed AGI.
- 1.1.6 Change 2 – An extension to the area allocated for Work No. 2B (natural gas AGI) at the CATS Terminal (Seal Sands). This minor expansion of the proposed AGI area for Work No. 2B follows further detailed land discussions with interested parties and is located entirely within the existing Order Limits and within the existing area of Work No 2A (natural gas pipeline).
- 1.1.7 Change 3 – Within the Power, Capture and Compression ('PCC') site, the Applicants propose the addition of a new AGI under Work No. 6A and the realignment of the carbon dioxide gathering network under Work No. 6. Both



the new AGI and realigned CO<sub>2</sub> pipeline are located entirely within the existing Order Limits.

- 1.1.8 Change 4 – Areas of land to be added to existing Work No. 3A (electrical connection) within Schedule 1 of the Order, this includes areas both within and outside the original Order Limits. The proposed additional area of above ground and underground high voltage ('HV') cabling under Work No. 3A would also include two structures to support cables as they pass over intervening railway lines and pipelines.
- 1.1.9 In association with the Work No. 3A change set out above, the Applicants will also request a change to Requirement 4 of Schedule 2 (Requirements) of the Order, as a means to ensure that details of the two proposed cable structures are submitted for the approval of the relevant planning authority. The proposed amendments to the Requirement 4 text are provided on the following page.
- 1.1.10 This DCO Habitats Regulations Assessment (HRA) Addendum is provided in support of the non-material change application (hereafter referred to as the 'Change Application') that is now being submitted to the Secretary of State for DESNZ.

## Purpose of this document

- 1.1.11 As a result of the Change Application, the most recent iteration of the HRA **[REP12-120]** submitted as part of the DCO Examination (hereafter referred to as the 'Original HRA') and its subsequent updates, most recently in August 2023 (Document Ref. 6.6), were reviewed to identify if any of the Proposed Development Changes altered the scope and conclusions of the Original HRA, as amended. For clarity, this is documents APP-080, REP3-002, REP6-044, REP6-109, REP8-009, REP9-003, REP12-042, REP12-120, AS-018, AS-194 (in the Examination Library [EN010103-001182-NZT\\_EL.pdf](#)) and the Response to the Secretary of State's Request for Further Information (August 2023; [EN010103-002815-NZT DCO 6.6 - Wider Project ES-HRA Addendum incl. Appendix 1 \(SoS RFI\) 4 Aug 23.pdf](#)).
- 1.1.12 This DCO HRA Addendum should be read in conjunction with the Original HRA **[REP12-120]**, and the Wider Project Environmental Statement – Habitat Regulations Assessment Addendum submitted in August 2023. This document also identifies where this DCO HRA Addendum text is different from the Original HRA, as amended.
- 1.1.13 This DCO HRA Addendum only considers how the Proposed Development Changes affect the assessments presented as part of the Original HRA (as amended most recently in August 2023). This document assesses the Proposed Development Change and Cumulative Effects Assessment (CEA) as relevant to the Proposed Development Changes; it does not assess the Scheme that is already consented.
- 1.1.14 The Proposed Development Changes are refinements to the extent of the works consented under the Order, which are required as a result of detailed design works in connection with the Proposed Development. As it is the changes to the extent of works that triggers potential changes to the test of likely significant effects (ToLSE) reported on in the Original HRA, this DCO



HRA Addendum assesses the impact of the Proposed Development Changes on the qualifying features of Habitats Sites (previously referred to as European Sites) and assesses whether there is any adverse effect on the integrity of the Habitats Sites by reference to the Order Work Numbers.

## 1.2 Scope and methodology of the HRA Addendum

### Overview

- 1.2.1 Throughout this DCO HRA Addendum, references are given to the Examination Library numbers assigned by PINS (identified within square brackets, e.g. **[APP-043]** for information accepted for Examination and to the Applicant's document numbers ('Application Document Ref.' numbers) for documents which are submitted as part of this Change Application.
- 1.2.2 A list of abbreviations used in this DCO HRA Addendum is provided within the original HRA **[REP12-120]**.
- 1.2.3 The general assessment methodology, relevant legislation, policy and guidance, set out in the Original HRA remain unchanged unless specifically stated in this DCO HRA Addendum.



## 2. Proposed Development Changes

### 2.1 Introduction

- 2.1.1 This chapter of the DCO HRA Addendum presents a description of the Proposed Development Changes.

### 2.2 Evaluation of Proposed Development Changes

- 2.2.1 Since the grant of the Order, four changes have been identified arising from continued Front End Engineering Design work.
- 2.2.2 The four changes have resulted in changes in the Work Numbers for the Proposed Development. These changes are set out in the amended Schedule 1 of the DCO.
- 2.2.3 An updated Site Location Plan is presented as Figure 1-1 of the DCO ES Addendum Volume II (Document Ref. 6.7b). The revised Order Limits are presented in Figure 3-1 and Figure 3-2 of the DCO ES Addendum Volume II (Document Ref. 6.7b).
- 2.2.4 The proposed non-material change application will seek the following changes (together 'the Proposed Development Changes') to Schedule 1 'Authorised Development' of the Order:

#### **Change 1: Work No. 6A (AGI at Seal Sands) & Work No. 9G (Temporary Construction Laydown Area for AGI)**

- 2.2.5 Change 1 - The addition of 'Work No. 6A' which would comprise an Above Ground Installation ('AGI') to allow a future spur off the CO<sub>2</sub> gathering network and associated apparatus to be located at Seal Sands and the addition of 'Work No 9G' to the Order consisting of a temporary construction laydown area for Work No. 6A located on land adjacent to the location of the new AGI. The proposed AGI under Work No. 6A is located within the existing Order Limits. The proposed temporary laydown area requires new land to be included within the Order Limits. The temporary laydown area in Work No. 9G is needed to facilitate the construction of the new AGI. As this additional land will be used for construction purposes, it will be used for the laydown and storage of plant and materials, along with the parking of construction site personnel vehicles. Whilst the additional land is located outside the existing Order Limits, the Applicants are not seeking any compulsory acquisition powers over the land as the land will be secured by agreement.

#### **Change 2: Work No. 2B (AGI Area Extension)**

- 2.2.6 Change 2 – An extension to the area allocated for Work No. 2B (natural gas AGI) at the CATS Terminal (Seal Sands). This minor expansion of the proposed AGI area for Work No. 2B of approximately 770 m<sup>2</sup> follows further detailed land discussions with interested parties and is located entirely within the existing Order Limits and within the existing area of Work No. 2A (natural gas pipeline).





### **Change 3: Work No. 6 (PCC Site CO<sub>2</sub> Gathering Network Realignment) & Work No 6A (PCC Site AGI)**

- 2.2.7 Change 3 - Within the Power, Capture and Compression ('PCC') Site, the Applicants propose the addition of a new AGI under Work No. 6A and the realignment of the CO<sub>2</sub> gathering network under Work No. 6. Both the new AGI and realigned CO<sub>2</sub> pipeline are located entirely within the existing Order Limits.

### **Change 4: Work No. 3A (Additional HV cabling areas)**

- 2.2.8 Change 4 - Areas of land to be added to existing Work No. 3A (electrical connection), including areas both within and outside the existing Order Limits. The proposed additional areas of above ground and underground high voltage electrical cabling under Work No. 3A will also include two new cable support structures adjacent to existing bridges over the Tees Valley Line, River Fleet and existing pipelines to carry the cables rather than using the existing bridges as previously specified.
- 2.2.9 In order to control the design of the cable structures, which are to be included as part of Work No. 3A, the Applicants are also seeking a change to Requirement 4 (Work No. 3) at Schedule 2 'Requirements' of the Order, as a means to ensure that details of the two proposed cable support structures are submitted for the approval of the relevant planning authority.



## 3. Assessment of Proposed Development Changes

### 3.1 Introduction

- 3.1.1 This chapter of the HRA Addendum identifies where the Proposed Development Changes have the potential to give rise to new or different Likely Significant Effects (LSEs) or Appropriate Assessment (AA) conclusions compared to those reported in the Original HRA.

### 3.2 Scope and methodology for the assessment of the proposed development changes

- 3.2.1 A preliminary screening of LSEs and AA arising from the Proposed Development Changes has been completed. The screening examined each Proposed Development Change within the context of the Original HRA to determine whether that Proposed Development Change would alter the assessment conclusions in any way.
- 3.2.2 The assessment of each impact pathway that was considered in the Original HRA was reviewed, and consideration given as to whether the Proposed Development Change would alter the conclusion of Likely Significant Effects or (where that impact pathway was taken forward to Appropriate Assessment) Adverse Effects on Integrity. For example, whether the area in question (if an entirely new parcel of land) had a functional role for the Teesmouth & Cleveland Coast SPA. If not then its use for the Proposed Development (including the relevant Proposed Development Change) would not affect functionally-linked land and therefore the conclusions of the Original HRA.
- 3.2.3 This also enabled consideration of the four Proposed Development Changes cumulatively. In other words, even if each of the Proposed Development Changes individually would not change the conclusions of the Original HRA, do they change it when considered cumulatively. Once that assessment had been undertaken, consideration was given to whether the Proposed Development Changes would affect the 'in combination' assessment. This assessment considers the in combination effects between other developments and the Proposed Development plus Proposed Design Changes.
- 3.2.4 The results of the screening assessment are presented in Tables 4-1 to 4-4.



**Table 3-1: Summary of Any Potential Changes in LSEs Screening or Appropriate Assessment compared to Original HRA and its addenda for Change 1 – Work No. 6A (New AGI) & Work No. 9G (Temporary Construction Laydown Area for AGI)**

<b>LSE Screening or AA Stage</b>	<b>Habitats Site</b>	<b>Relevant Impact Pathways in the Construction, Operational and Decommissioning Phases</b>	<b>Screening Decision</b>	<b>Rationale - potential for new or different LSEs and AA conclusions compared to Original HRA (including addenda) arising from Proposed Development Changes</b>
LSEs Screening	Teesmouth & Cleveland Coast SPA/Ramsar	Atmospheric pollution (construction/decommissioning)	Out	The Original HRA assessed the potential for the Proposed Development to impact the qualifying birds (particularly nesting little tern and avocet) through atmospheric pollution from construction/decommissioning traffic. However, LSEs on the SPA/Ramsar regarding this impact pathway were excluded on the basis that no tern or avocet nesting sites are located within 200m of the Affected Road Network (ARN) and any Non-Road Mechanised Machinery (NRRM) will only be operational in the part of the Proposed Development closest to the SPA/Ramsar for a limited duration and 'as required' basis. Proposed Development Change 1 will not alter the ARN or involve the use of NRRM close to the SPA/Ramsar and, therefore, has no potential to alter this conclusion.
		Water quality – sewage (construction/decommissioning)	Out	Proposed Development Change 1 has no potential to change the 'no LSEs' screening conclusion. The works comprising the addition of a new AGI and temporary

LSE Screening or AA Stage	Habitats Site	Relevant Impact Pathways in the Construction, Operational and Decommissioning Phases	Screening Decision	Rationale - potential for new or different LSEs and AA conclusions compared to Original HRA (including addenda) arising from Proposed Development Changes
				construction lay down will not increase the overall number of construction staff required for the Proposed Development. Furthermore, all sewage produced will be treated using a package treatment plant and disposed off-site as secured by Requirement 37 of the DCO.
	Berwickshire and North Northumberland Coast SAC & Humber Estuary SAC	Disturbance in functionally linked habitat – grey seal (construction/decommissioning)	Out	The Original HRA concluded that LSEs of the Proposed Development regarding disturbance of grey seal in functionally linked habitats could be excluded based on the large extent of foraging habitat and number of haul-out sites available to the wider North Sea population. Furthermore, Proposed Development Change 1 does not involve any in-water works in estuarine or marine habitats. There is no potential for Proposed Development Change 1 to affect this screening conclusion.
	The Wash & North Norfolk Coast SAC	Disturbance in functionally linked habitat – harbour seal (construction/decommissioning)	Out	The Original HRA concluded that LSEs of the Proposed Development regarding disturbance of harbour seal in functionally linked habitats could be excluded based on the large extent of foraging available to the wider North Sea population. Furthermore,

LSE Screening or AA Stage	Habitats Site	Relevant Impact Pathways in the Construction, Operational and Decommissioning Phases	Screening Decision	Rationale - potential for new or different LSEs and AA conclusions compared to Original HRA (including addenda) arising from Proposed Development Changes
				Proposed Development Change 1 does not involve any in-water works in estuarine or marine habitats. There is no potential for Proposed Development Change 1 to affect this screening conclusion.
	River Tweed SAC Tweed Estuary SAC Humber Estuary SAC	Disturbance in functionally linked habitat – Atlantic salmon and sea lamprey (construction/decommissioning)	Out	The Original HRA assessed the potential for the Proposed Development to result in disturbance to functionally linked habitat of anadromous Atlantic salmon and sea lamprey. However, LSEs regarding this impact pathway were excluded based on the fact that construction works are limited to the intertidal zone adjoining and dune habitats within the Teesmouth & Cleveland Coast SPA/Ramsar, and there being no potential for affecting the migratory routes of these fish. Proposed Development Change 1 has no potential to change this conclusion and, in any case, does not involve in-water works that could lead to disturbance.
	Teesmouth & Cleveland Coast SPA/Ramsar	Atmospheric pollution from site traffic (operation)	Out	Proposed Development Change 1 will not involve any operational vehicle movements above and beyond those already required for the consented scheme and, therefore, has no potential to impact the volume of the

LSE Screening or AA Stage	Habitats Site	Relevant Impact Pathways in the Construction, Operational and Decommissioning Phases	Screening Decision	Rationale - potential for new or different LSEs and AA conclusions compared to Original HRA (including addenda) arising from Proposed Development Changes
				operational 2-way vehicle movements. Proposed Development Change 1 has no potential to alter the 'no LSEs' conclusion.
		Direct habitat loss (operation)	Out	Proposed Development Change 1 is located within the previously assessed site boundary, or on land immediately adjacent to it that is not located within or of functional value to any Habitats Site. The potential for direct habitat loss can be excluded. Proposed Development Change 1 has no potential for changing the conclusion of 'no LSEs'.
		Physical effects of discharge of heated cooling water (operation)	Out	As Proposed Development Change 1 pertains to the installation of an additional AGI and temporary construction laydown area, it has no potential to increase the volume of cooling water that will be returned to the Tees Bay via the existing steelworks or replacement outfall head. Proposed Development Change 1, therefore, has no potential to change the conclusion of 'no LSEs'.
		Coastal squeeze (operation)	Out	Proposed Development Change 1 is located inland and within an area of existing brownfield land. It is not located within or adjacent to any Habitats Sites. Therefore, no

LSE Screening or AA Stage	Habitats Site	Relevant Impact Pathways in the Construction, Operational and Decommissioning Phases	Screening Decision	Rationale - potential for new or different LSEs and AA conclusions compared to Original HRA (including addenda) arising from Proposed Development Changes
				exacerbation of coastal squeeze will occur. Proposed Development Change 1, therefore, has no potential to alter the conclusion of 'no LSEs'.
	Durham Coast SAC Northumbria Coast SPA/Ramsar	Atmospheric pollution from stack emissions (operation)	Out	Proposed Development Change 1 is not associated with the operational emission of atmospheric pollutants and, therefore, has no potential to alter the conclusions of 'no LSEs' on the integrity of the Durham Coast SAC and Northumbria Coast SPA/Ramsar regarding this impact pathway.
AA	Teemouth & Cleveland Coast SPA/Ramsar	Visual and noise disturbance (construction/decommissioning)	Out	Proposed Development Change 1 proposes the construction of an additional Above Ground Installation (AGI) and a temporary construction laydown area. However, given their small size and location relative to the SPA this will not increase the noise of construction/decommissioning activities already assessed in the Original HRA (especially considering that the construction of the PCC Site adjoining the SPA/Ramsar involves construction techniques associated with much higher sound pressure levels at source). Therefore, Proposed Development Change 1 has no potential to change the

LSE Screening or AA Stage	Habitats Site	Relevant Impact Pathways in the Construction, Operational and Decommissioning Phases	Screening Decision	Rationale - potential for new or different LSEs and AA conclusions compared to Original HRA (including addenda) arising from Proposed Development Changes
				conclusion of no adverse effects on site integrity.
		Water Quality (construction/decommissioning)	Out	The potential for water quality impacts in the construction and decommissioning phases as a result of synthetic and non-synthetic pollutants (e.g. from fuel / oil spills, leaking machinery, inappropriate storage of materials and sedimentation) reaching the Teesmouth & Cleveland Coast SPA/Ramsar via surface runoff was assessed in the Original HRA, although this applied primarily to the Main Site adjacent to the SPA/Ramsar. These risks would not be changed by Proposed Development Change 1, given its separation from the Teesmouth & Cleveland Coast SPA/Ramsar. Moreover, a range of best practice measures will be delivered that will prevent adverse effects on the water environment from occurring, such as a Final Construction Environmental Management Plan (CEMP), Water Management Plan (WMP) and adherence to latest Pollution Prevention Guidance. Therefore, the conclusion of no adverse effects on the integrity of the Teesmouth & Cleveland Coast



LSE Screening or AA Stage	Habitats Site	Relevant Impact Pathways in the Construction, Operational and Decommissioning Phases	Screening Decision	Rationale - potential for new or different LSEs and AA conclusions compared to Original HRA (including addenda) arising from Proposed Development Changes
				SPA/Ramsar is unaffected by this Proposed Development Change.
		Direct landtake [HDD] collapse (construction/decommissioning)	Out	Proposed Development Change 1 does not propose any HDD-related works in addition to those already assessed in the Original HRA and, therefore, has no potential to alter the conclusions of no adverse effects on the integrity of the Teesmouth & Cleveland Coast SPA/Ramsar regarding this impact pathway.
	Southern North Sea SAC	Disturbance in functionally linked habitat (construction/decommissioning)	Out	The Original HRA discussed the potential for disturbance to harbour porpoise as a result of Unexploded Ordnance (UXO) detonations. However, Proposed Development Change 1 does not involve any preparatory in-water works and, therefore, has no potential to alter the conclusions of no adverse effects on the integrity of the Southern North Sea SAC regarding this impact pathway.
	Teesmouth & Cleveland Coast SPA/Ramsar	Effects on foraging resources of SPA / Ramsar birds (operation)	Out	Proposed Development Change 1 has no potential to alter the conclusions of no adverse effects on the integrity of the Teesmouth & Cleveland Coast SPA/Ramsar regarding the installation of the new outfall head and the associated rock armouring for scour protection.

LSE Screening or AA Stage	Habitats Site	Relevant Impact Pathways in the Construction, Operational and Decommissioning Phases	Screening Decision	Rationale - potential for new or different LSEs and AA conclusions compared to Original HRA (including addenda) arising from Proposed Development Changes
	North York Moors SAC/SPA	Atmospheric pollution (operation)	Out	Proposed Development Change 1 is not associated with the operational emission of atmospheric pollutants and, therefore, has no potential to alter the conclusions of no adverse effects on the integrity of the North York Moors SAC/SPA regarding this impact pathway.

3.2.5 The screening assessment has identified that the Proposed Development Changes will not result in LSEs or change the Appropriate Assessment conclusions.

**Table 3-2: Summary of Any Potential Changes in LSEs Screening or Appropriate Assessment compared to Original HRA for Change 2 – Work No. 2B (AGI Area Extension)**

<b>LSE Screening or AA Stage</b>	<b>Habitats Site</b>	<b>Relevant Impact Pathways in the Construction, Operational and Decommissioning Phases</b>	<b>Screening Decision</b>	<b>Rationale - potential for new or different LSEs and AA conclusions compared to Original HRA arising from Proposed Development Changes</b>
LSEs Screening	Teesmouth & Cleveland Coast SPA/Ramsar	Atmospheric pollution (construction/decommissioning)	Out	The Original HRA assessed the potential for the Proposed Development to impact the qualifying birds (particularly nesting little tern and avocet) through atmospheric pollution from construction/decommissioning traffic. However, LSEs on the SPA/Ramsar regarding this impact pathway were excluded on the basis that no little tern nesting sites are located within 200m of the Affected Road Network (ARN) and any Non-Road Mechanised Machinery (NRRM) will only be operational in the part of the Proposed Development closest to the SPA/Ramsar for a limited duration and 'as required' basis. Proposed Development Change 2 will not alter the ARN or involve the use of NRRM close to the SPA/Ramsar and, therefore, has no potential to alter this conclusion.
		Water quality – sewage (construction/decommissioning)	Out	Proposed Development Change 2 has no potential to change the 'no LSEs' screening conclusion. The works comprising an extension to the area allocated for Work No.

LSE Screening or AA Stage	Habitats Site	Relevant Impact Pathways in the Construction, Operational and Decommissioning Phases	Screening Decision	Rationale - potential for new or different LSEs and AA conclusions compared to Original HRA arising from Proposed Development Changes
				2B (natural gas AGI) at the CATS Terminal (Seal Sands) will not increase the overall number of construction staff required for the Proposed Development. Furthermore, all sewage produced will be treated using a package treatment plant and disposed off-site in line with Requirement 37 of the DCO.
	Berwickshire and North Northumberland Coast SAC & Humber Estuary SAC	Disturbance in functionally linked habitat – grey seal (construction/decommissioning)	Out	The Original HRA concluded that LSEs of the Proposed Development regarding disturbance of grey seal in functionally linked habitats could be excluded based on the large extent of foraging habitat and number of haul-out sites available to the wider North Sea population. Furthermore, Proposed Development Change 2 does not involve any in-water works in estuarine or marine habitats. There is no potential for Proposed Development Change 2 to affect this screening conclusion.
	The Wash & North Norfolk Coast SAC	Disturbance in functionally linked habitat – harbour seal (construction/decommissioning)	Out	The Original HRA concluded that LSEs of the Proposed Development regarding disturbance of harbour seal in functionally linked habitats could be excluded based on the large extent of foraging available to the wider North Sea population. Furthermore,

LSE Screening or AA Stage	Habitats Site	Relevant Impact Pathways in the Construction, Operational and Decommissioning Phases	Screening Decision	Rationale - potential for new or different LSEs and AA conclusions compared to Original HRA arising from Proposed Development Changes
				Proposed Development Change 2 does not involve any in-water works in estuarine or marine habitats. There is no potential for Proposed Development Change 2 to affect this screening conclusion.
	River Tweed SAC Tweed Estuary SAC Humber Estuary SAC	Disturbance in functionally linked habitat – Atlantic salmon and sea lamprey (construction/decommissioning)	Out	The Original HRA assessed the potential for the Proposed Development to result in disturbance to functionally linked habitat of anadromous Atlantic salmon and sea lamprey. However, LSEs regarding this impact pathway were excluded based on the fact that construction works are limited to the intertidal zone adjoining and dune habitats within the Teesmouth & Cleveland Coast SPA/Ramsar, and there being no potential for affecting the migratory routes of these fish. Proposed Development Change 2 has no potential to change this conclusion and, in any case, does not involve in-water works that could lead to disturbance.
	Teesmouth & Cleveland Coast SPA/Ramsar	Atmospheric pollution from site traffic (operation)	Out	Proposed Development Change 2 will not involve any operational vehicle movements beyond that for the consented scheme and, therefore, has no potential to impact the volume of the operational 2-way vehicle

LSE Screening or AA Stage	Habitats Site	Relevant Impact Pathways in the Construction, Operational and Decommissioning Phases	Screening Decision	Rationale - potential for new or different LSEs and AA conclusions compared to Original HRA arising from Proposed Development Changes
				movements. Proposed Development Change 2 has no potential to alter the 'no LSEs' conclusion.
		Direct habitat loss (operation)	Out	Proposed Development Change 2 is not located within or adjacent to any Habitats Sites and the potential for direct habitat loss can be excluded. Proposed Development Change 2 has no potential for changing the conclusion of 'no LSEs'.
		Physical effects of discharge of heated cooling water (operation)	Out	As Proposed Development Change 2 pertains to an extension to the area allocated for Work No. 2B (natural gas AGI) at the CATS Terminal (Seal Sands), it has no potential to increase the volume of cooling water that will be returned to the Tees Bay via the existing steelworks or replacement outfall head. Proposed Development Change 2, therefore, has no potential to change the conclusion of 'no LSEs'.
		Coastal squeeze (operation)	Out	Proposed Development Change 2 is located inshore and is not located within or adjacent to any Habitats Sites. It is located in an area that is already an existing brownfield site. Therefore, no exacerbation of coastal squeeze will occur. Proposed Development



LSE Screening or AA Stage	Habitats Site	Relevant Impact Pathways in the Construction, Operational and Decommissioning Phases	Screening Decision	Rationale - potential for new or different LSEs and AA conclusions compared to Original HRA arising from Proposed Development Changes
				Change 1, therefore, has no potential to alter the conclusion of 'no LSEs'.
	Durham Coast SAC Northumbria Coast SPA/Ramsar	Atmospheric pollution from stack emissions (operation)	Out	Proposed Development Change 2 is not associated with the operational emission of atmospheric pollutants and, therefore, has no potential to alter the conclusions of 'no LSEs' on the integrity of the Durham Coast SAC and Northumbria Coast SPA/Ramsar regarding this impact pathway.
AA	Teesmouth & Cleveland Coast SPA/Ramsar	Visual and noise disturbance (construction/decommissioning)	Out	Proposed Development Change 2 proposes an extension to the area allocated for Work No. 2B (natural gas AGI) at the CATS Terminal (Seal Sands). However, given their small size and location relative to the SPA this will not increase the noise of construction/decommissioning activities already assessed in the Original HRA (especially considering that the construction of the PCC Site adjoining the SPA/Ramsar involves construction techniques associated with much higher sound pressure levels at source). Therefore, Proposed Development Change 2 has no potential to change the conclusion of no adverse effects on site integrity.

LSE Screening or AA Stage	Habitats Site	Relevant Impact Pathways in the Construction, Operational and Decommissioning Phases	Screening Decision	Rationale - potential for new or different LSEs and AA conclusions compared to Original HRA arising from Proposed Development Changes
		Water Quality (construction/decommissioning)	Out	The potential for water quality impacts in the construction and decommissioning phases as a result of synthetic and non-synthetic pollutants (e.g. from fuel / oil spills, leaking machinery, inappropriate storage of materials and sedimentation) reaching the Teesmouth & Cleveland Coast SPA/Ramsar via surface runoff was assessed in the Original HRA, although this applied primarily to the Main Site adjacent to the SPA/Ramsar. These risks would not be changed by Proposed Development Change 2, given its separation from the Teesmouth & Cleveland Coast SPA/Ramsar. Moreover, a range of best practice measures will be delivered that will prevent adverse effects on the water environment from occurring, such as a Final Construction Environmental Management Plan (CEMP), Water Management Plan (WMP) and adherence to latest Pollution Prevention Guidance. Therefore, the conclusion of no adverse effects on the integrity of the Teesmouth & Cleveland Coast SPA/Ramsar is unaffected by this Proposed Development Change.

LSE Screening or AA Stage	Habitats Site	Relevant Impact Pathways in the Construction, Operational and Decommissioning Phases	Screening Decision	Rationale - potential for new or different LSEs and AA conclusions compared to Original HRA arising from Proposed Development Changes
		Direct landtake [HDD] collapse (construction/decommissioning)	Out	Proposed Development Change 2 does not propose any HDD-related works in addition to those already assessed in the Original HRA and, therefore, has no potential to alter the conclusions of no adverse effects on the integrity of the Teesmouth & Cleveland Coast SPA/Ramsar regarding this impact pathway.
	Southern North Sea SAC	Disturbance in functionally linked habitat (construction/decommissioning)	Out	The Original HRA discussed the potential for disturbance to harbour porpoise as a result of Unexploded Ordnance (UXO) detonations. However, Proposed Development Change 2 does not involve any preparatory in-water works and, therefore, has no potential to alter the conclusions of no adverse effects on the integrity of the Southern North Sea SAC regarding this impact pathway.
	Teesmouth & Cleveland Coast SPA/Ramsar	Effects on foraging resources of SPA / Ramsar birds (operation)	Out	Proposed Development Change 2 has no potential to alter the conclusions of no adverse effects on the integrity of the Teesmouth & Cleveland Coast SPA/Ramsar regarding the new outfall head and the installation of the associated rock armouring for scour protection.

LSE Screening or AA Stage	Habitats Site	Relevant Impact Pathways in the Construction, Operational and Decommissioning Phases	Screening Decision	Rationale - potential for new or different LSEs and AA conclusions compared to Original HRA arising from Proposed Development Changes
	North York Moors SAC/SPA	Atmospheric pollution (operation)	Out	Proposed Development Change 2 is not associated with the operational emission of atmospheric pollutants and, therefore, has no potential to alter the conclusions of no adverse effects on the integrity of the North York Moors SAC/SPA regarding this impact pathway.

3.2.1 The screening assessment has identified that the Proposed Development Changes will not result in LSEs or change the Appropriate Assessment conclusions.

**Table 3-3: Summary of Any Potential Changes in LSEs Screening or Appropriate Assessment compared to Original HRA for Change 3 - Work No. 6 (PCC CO2 Gathering Network Realignment) & Work No 6A (PCC Site CO2 AGI)**

<b>LSE Screening or AA Stage</b>	<b>Habitats Site</b>	<b>Relevant Impact Pathways in the Construction, Operational and Decommissioning Phases</b>	<b>Screening Decision</b>	<b>Rationale - potential for new or different LSEs and AA conclusions compared to Original HRA arising from Proposed Development Changes</b>
LSEs Screening	Teesmouth & Cleveland Coast SPA/Ramsar	Atmospheric pollution (construction/decommissioning)	Out	The Original HRA assessed the potential for the Proposed Development to impact the qualifying birds (particularly nesting little tern and avocet) through atmospheric pollution from construction/decommissioning traffic. However, LSEs on the SPA/Ramsar regarding this impact pathway were excluded on the basis that no little tern nesting sites are located within 200m of the Affected Road Network (ARN) and any Non-Road Mechanised Machinery (NRRM) will only be operational in the part of the Proposed Development closest to the SPA/Ramsar for a limited duration and 'as required' basis. Proposed Development Change 3 will not alter the ARN or involve the use of NRRM close to the SPA/Ramsar and, therefore, has no potential to alter this conclusion.
		Water quality – sewage (construction/decommissioning)	Out	Proposed Development Change 3 has no potential to change the 'no LSEs' screening conclusion. The works comprising the addition of a new AGI and realignment of the

LSE Screening or AA Stage	Habitats Site	Relevant Impact Pathways in the Construction, Operational and Decommissioning Phases	Screening Decision	Rationale - potential for new or different LSEs and AA conclusions compared to Original HRA arising from Proposed Development Changes
				CO <sub>2</sub> gathering network will not increase the overall number of construction staff required for the Proposed Development. Furthermore, all sewage produced will be treated using a package treatment plant and disposed off-site as secured by Requirement 37 of the DCO.
	Berwickshire and North Northumberland Coast SAC & Humber Estuary SAC	Disturbance in functionally linked habitat – grey seal (construction/decommissioning)	Out	The Original HRA concluded that LSEs of the Proposed Development regarding disturbance of grey seal in functionally linked habitats could be excluded based on the large extent of foraging habitat and number of haul-out sites available to the wider North Sea population. Furthermore, Proposed Development Change 3 does not involve any in-water works in estuarine or marine habitats. There is no potential for Proposed Development Change 3 to affect this screening conclusion.
	The Wash & North Norfolk Coast SAC	Disturbance in functionally linked habitat – harbour seal (construction/decommissioning)	Out	The Original HRA concluded that LSEs of the Proposed Development regarding disturbance of harbour seal in functionally linked habitats could be excluded based on the large extent of foraging available to the wider North Sea population. Furthermore,



LSE Screening or AA Stage	Habitats Site	Relevant Impact Pathways in the Construction, Operational and Decommissioning Phases	Screening Decision	Rationale - potential for new or different LSEs and AA conclusions compared to Original HRA arising from Proposed Development Changes
				Proposed Development Change 3 does not involve any in-water works in estuarine or marine habitats. There is no potential for Proposed Development Change 3 to affect this screening conclusion.
	River Tweed SAC Tweed Estuary SAC Humber Estuary SAC	Disturbance in functionally linked habitat – Atlantic salmon and sea lamprey (construction/decommissioning)	Out	The Original HRA assessed the potential for the Proposed Development to result in disturbance to functionally linked habitat of anadromous Atlantic salmon and sea lamprey. However, LSEs regarding this impact pathway were excluded based on the fact that construction works are limited to the intertidal zone adjoining and dune habitats within the Teesmouth & Cleveland Coast SPA/Ramsar, and there being no potential for affecting the migratory routes of these fish. Proposed Development Change 3 has no potential to change this conclusion and, in any case, does not involve in-water works that could lead to disturbance.
	Teesmouth & Cleveland Coast SPA/Ramsar	Atmospheric pollution from site traffic (operation)	Out	Proposed Development Change 3 will not involve any operational vehicle movements beyond those for the consented scheme and, therefore, has no potential to impact the volume of the operational 2-way vehicle

LSE Screening or AA Stage	Habitats Site	Relevant Impact Pathways in the Construction, Operational and Decommissioning Phases	Screening Decision	Rationale - potential for new or different LSEs and AA conclusions compared to Original HRA arising from Proposed Development Changes
				movements. Proposed Development Change 3 has no potential to alter the 'no LSEs' conclusion.
		Direct habitat loss (operation)	Out	Proposed Development Change 3 will not change the trajectory of the CO <sub>2</sub> Export Pipeline under the Teesmouth & Cleveland Coast SPA/Ramsar. For the section of pipeline traversing the SPA/Ramsar LSEs were excluded for the consented scheme in the Original HRA (except for the potential of HDD collapse, which was taken forward to appropriate assessment where the risk was discussed in more detail) because the dune system will be traversed using HDD and the potential for direct habitat loss can be excluded. None of the Proposed Development Changes alter the risk of HDD collapse. Proposed Development Change 3 has no potential for changing the conclusion of the Original HRA.
		Physical effects of discharge of heated cooling water (operation)	Out	As Proposed Development Change 3 pertains to the installation of an additional AGI and realignment of the CO <sub>2</sub> Gathering Network, it has no potential to increase the volume of cooling water that will be returned

LSE Screening or AA Stage	Habitats Site	Relevant Impact Pathways in the Construction, Operational and Decommissioning Phases	Screening Decision	Rationale - potential for new or different LSEs and AA conclusions compared to Original HRA arising from Proposed Development Changes
				to the Tees Bay via the existing steelworks or replacement outfall head. Proposed Development Change 3, therefore, has no potential to change the conclusion of 'no LSEs'.
		Coastal squeeze (operation)	Out	Proposed Development Change 3 will occur in an area that is already an existing brownfield site. It is located in shore and not within any Habitats Sites. Therefore, no exacerbation of coastal squeeze will occur. Proposed Development Change 3, therefore, has no potential to alter the conclusion of 'no LSEs'.
	Durham Coast SAC Northumbria Coast SPA/Ramsar	Atmospheric pollution from stack emissions (operation)	Out	Proposed Development Change 3 is not associated with the operational emission of atmospheric pollutants and, therefore, has no potential to alter the conclusions of 'no LSEs' on the integrity of the Durham Coast SAC and Northumbria Coast SPA/Ramsar regarding this impact pathway.
AA	Teesmouth & Cleveland Coast SPA/Ramsar	Visual and noise disturbance (construction/decommissioning)	Out	Proposed Development Change 3 proposes the construction of an additional Above Ground Installation (AGI) and the realignment of the CO2 Gathering Network. However, given the location within the Main

LSE Screening or AA Stage	Habitats Site	Relevant Impact Pathways in the Construction, Operational and Decommissioning Phases	Screening Decision	Rationale - potential for new or different LSEs and AA conclusions compared to Original HRA arising from Proposed Development Changes
				Site where worst case noise had already been assessed for the Original HRA this will not increase the noise profiles of construction/decommissioning activities already assessed in the Original HRA (especially considering that the construction of the PCC Site adjoining the SPA/Ramsar involves construction techniques associated with much higher sound pressure levels at source). Therefore, Proposed Development Change 3 has no potential to change the conclusion of no adverse effects on site integrity.
		Water Quality (construction/decommissioning)	Out	The potential for water quality impacts in the construction and decommissioning phases as a result of synthetic and non-synthetic pollutants (e.g. from fuel / oil spills, leaking machinery, inappropriate storage of materials and sedimentation) reaching the Teesmouth & Cleveland Coast SPA/Ramsar via surface runoff was assessed in the Original HRA, although this applied primarily to the Main Site adjacent to the SPA/Ramsar. These risks would not be changed by Proposed Development Change 3, given its separation

LSE Screening or AA Stage	Habitats Site	Relevant Impact Pathways in the Construction, Operational and Decommissioning Phases	Screening Decision	Rationale - potential for new or different LSEs and AA conclusions compared to Original HRA arising from Proposed Development Changes
				from the Teesmouth & Cleveland Coast SPA/Ramsar. Moreover, a range of best practice measures will be delivered that will prevent adverse effects on the water environment from occurring, such as a Final Construction Environmental Management Plan (CEMP), Water Management Plan (WMP) and adherence to latest Pollution Prevention Guidance. Therefore, the conclusion of no adverse effects on the integrity of the Teesmouth & Cleveland Coast SPA/Ramsar is unaffected by this change in development.
		Direct landtake [HDD] collapse (construction/decommissioning)	Out	Proposed Development Change 3 does not propose any HDD-related works in addition to those already assessed in the Original HRA and, therefore, has no potential to alter the conclusions of no adverse effects on the integrity of the Teesmouth & Cleveland Coast SPA/Ramsar regarding this impact pathway.
	Southern North Sea SAC	Disturbance in functionally linked habitat (construction/decommissioning)	Out	The Original HRA discussed the potential for disturbance to harbour porpoise as a result of Unexploded Ordnance (UXO) detonations. However, Proposed Development Change 3 does not involve any preparatory in-water

<b>LSE Screening or AA Stage</b>	<b>Habitats Site</b>	<b>Relevant Impact Pathways in the Construction, Operational and Decommissioning Phases</b>	<b>Screening Decision</b>	<b>Rationale - potential for new or different LSEs and AA conclusions compared to Original HRA arising from Proposed Development Changes</b>
				works and, therefore, has no potential to alter the conclusions of no adverse effects on the integrity of the Southern North Sea SAC regarding this impact pathway.
	Teesmouth & Cleveland Coast SPA/Ramsar	Effects on foraging resources of SPA / Ramsar birds (operation)	Out	Proposed Development Change 3 has no potential to alter the conclusions of no adverse effects on the integrity of the Teesmouth & Cleveland Coast SPA/Ramsar regarding the new outfall head and the installation of the associated rock armouring for scour protection.
	North York Moors SAC/SPA	Atmospheric pollution (operation)	Out	Proposed Development Change 3 is not associated with the operational emission of atmospheric pollutants and, therefore, has no potential to alter the conclusions of no adverse effects on the integrity of the North York Moors SAC/SPA regarding this impact pathway.

3.2.2 The screening assessment has identified that the Proposed Development Changes will not result in LSEs or change the Appropriate Assessment conclusions.



**Table 3-4: Summary of Any Potential Changes in LSEs Screening or Appropriate Assessment compared to Original HRA for Change 4 – Work No. 3A (Additional HV cabling areas)**

<b>LSE Screening or AA Stage</b>	<b>Habitats Site</b>	<b>Relevant Impact Pathways in the Construction, Operational and Decommissioning Phases</b>	<b>Screening Decision</b>	<b>Rationale - potential for new or different LSEs and AA conclusions compared to Original HRA arising from Proposed Development Changes</b>
LSEs Screening	Teesmouth & Cleveland Coast SPA/Ramsar	Atmospheric pollution (construction/decommissioning)	Out	The Original HRA assessed the potential for the Proposed Development to impact the qualifying birds (particularly nesting little tern and avocet) through atmospheric pollution from construction/decommissioning traffic. However, LSEs on the SPA/Ramsar regarding this impact pathway were excluded on the basis that no little tern nesting sites are located within 200m of the Affected Road Network (ARN) and any Non-Road Mechanised Machinery (NRRM) will only be operational in the part of the Proposed Development closest to the SPA/Ramsar for a limited duration and 'as required' basis. Proposed Development Change 4 will not alter the ARN or involve the use of NRRM close to the SPA/Ramsar and, therefore, has no potential to alter this conclusion.
		Water quality – sewage (construction/decommissioning)	Out	Proposed Development Change 4 has no potential to change the 'no LSEs' screening conclusion. The works comprising additional cabling areas will not increase the overall

LSE Screening or AA Stage	Habitats Site	Relevant Impact Pathways in the Construction, Operational and Decommissioning Phases	Screening Decision	Rationale - potential for new or different LSEs and AA conclusions compared to Original HRA arising from Proposed Development Changes
				number of construction staff required for the Proposed Development. Furthermore, all sewage produced will be treated using a package treatment plant and disposed off-site in line with Requirement 37 of the DCO.
	Berwickshire and North Northumberland Coast SAC & Humber Estuary SAC	Disturbance in functionally linked habitat – grey seal (construction/decommissioning)	Out	The Original HRA concluded that LSEs of the Proposed Development regarding disturbance of grey seal in functionally linked habitats could be excluded based on the large extent of foraging habitat and number of haul-out sites available to the wider North Sea population. Furthermore, Proposed Development Change 4 does not involve any in-water works in estuarine or marine habitats. There is no potential for Proposed Development Change 4 to affect this screening conclusion.
	The Wash & North Norfolk Coast SAC	Disturbance in functionally linked habitat – harbour seal (construction/decommissioning)	Out	The Original HRA concluded that LSEs of the Proposed Development regarding disturbance of harbour seal in functionally linked habitats could be excluded based on the large extent of foraging available to the wider North Sea population. Furthermore, Proposed Development Change 4 does not involve any in-water works in estuarine or

LSE Screening or AA Stage	Habitats Site	Relevant Impact Pathways in the Construction, Operational and Decommissioning Phases	Screening Decision	Rationale - potential for new or different LSEs and AA conclusions compared to Original HRA arising from Proposed Development Changes
---------------------------	---------------	--	--------------------	---

				marine habitats. There is no potential for Proposed Development Change 4 to affect this screening conclusion.
	River Tweed SAC Tweed Estuary SAC Humber Estuary SAC	Disturbance in functionally linked habitat – Atlantic salmon and sea lamprey (construction/decommissioning)	Out	The Original HRA assessed the potential for the Proposed Development to result in disturbance to functionally linked habitat of anadromous Atlantic salmon and sea lamprey. However, LSEs regarding this impact pathway were excluded since the construction works are limited to the intertidal zone adjoining and dune habitats within the Teesmouth & Cleveland Coast SPA/Ramsar, and there being no potential for affecting the migratory routes of these fish. Proposed Development Change 4 has no potential to change this conclusion and, in any case, does not involve in-water works that could lead to disturbance.
	Teesmouth & Cleveland Coast SPA/Ramsar	Atmospheric pollution from site traffic (operation)	Out	Proposed Development Change 4 will not involve any greater operational vehicle movements than will be required for the consented scheme and, therefore, has no potential to impact the volume of the operational 2-way vehicle movements.

LSE Screening or AA Stage	Habitats Site	Relevant Impact Pathways in the Construction, Operational and Decommissioning Phases	Screening Decision	Rationale - potential for new or different LSEs and AA conclusions compared to Original HRA arising from Proposed Development Changes
				Proposed Development Change 4 has no potential to alter the 'no LSEs' conclusion.
		Direct habitat loss (operation)	Out	Proposed Development Change 4 is not located within a Habitats Site and is located within an area of brownfield land. The potential for direct habitat loss can be excluded. Proposed Development Change 4 has no potential for changing the conclusion of 'no LSEs'.
		Physical effects of discharge of heated cooling water (operation)	Out	As Proposed Development Change 4 pertains to additional cabling areas, it has no potential to increase the volume of cooling water that will be returned to the Tees Bay via the existing steelworks or replacement outfall head. Proposed Development Change 4, therefore, has no potential to change the conclusion of 'no LSEs'.
		Coastal squeeze (operation)	Out	Proposed Development Change 4 will occur in an area that is already an existing brownfield site. It is located inland and away from any Habitats Sites. Therefore, no exacerbation of coastal squeeze will occur. Proposed Development Change 4, therefore, has no potential to alter the conclusion of 'no LSEs'.

LSE Screening or AA Stage	Habitats Site	Relevant Impact Pathways in the Construction, Operational and Decommissioning Phases	Screening Decision	Rationale - potential for new or different LSEs and AA conclusions compared to Original HRA arising from Proposed Development Changes
	Durham Coast SAC Northumbria Coast SPA/Ramsar	Atmospheric pollution from stack emissions (operation)	Out	Proposed Development Change 4 is not associated with the operational emission of atmospheric pollutants and, therefore, has no potential to alter the conclusions of 'no LSEs' on the integrity of the Durham Coast SAC and Northumbria Coast SPA/Ramsar regarding this impact pathway.
AA	Teesmouth & Cleveland Coast SPA/Ramsar	Visual and noise disturbance (construction/decommissioning)	Out	Proposed Development Change 4 proposes additional cabling areas. However, given their small size and location relative to the SPA this will not increase the noise profiles of construction/decommissioning activities already assessed in the Original HRA (especially considering that the construction of the PCC Site adjoining the SPA/Ramsar involves construction techniques associated with much higher sound pressure levels at source). Therefore, Proposed Development Change 4 has no potential to change the conclusion of no adverse effects on site integrity.
		Water Quality (construction/decommissioning)	Out	The potential for water quality impacts in the construction and decommissioning phases as a result of synthetic and non-synthetic pollutants (e.g. from fuel / oil spills, leaking

LSE Screening or AA Stage	Habitats Site	Relevant Impact Pathways in the Construction, Operational and Decommissioning Phases	Screening Decision	Rationale - potential for new or different LSEs and AA conclusions compared to Original HRA arising from Proposed Development Changes
				machinery, inappropriate storage of materials and sedimentation) reaching the Teesmouth & Cleveland Coast SPA/Ramsar via surface runoff was assessed in the Original HRA, although this applied primarily to the Main Site adjacent to the SPA/Ramsar. These risks would not be changed by Proposed Development Change 4, given its separation from the Teesmouth & Cleveland Coast SPA/Ramsar. Moreover, a range of best practice measures will be delivered that will prevent adverse effects on the water environment from occurring, such as a Final Construction Environmental Management Plan (CEMP), Water Management Plan (WMP) and adherence to latest Pollution Prevention Guidance. Therefore, the conclusion of no adverse effects on the integrity of the Teesmouth & Cleveland Coast SPA/Ramsar is unaffected by this change in development.
		Direct landtake [HDD] collapse (construction/decommissioning)	Out	Proposed Development Change 4 does not propose any HDD-related works in addition to those already assessed in the Original HRA and, therefore, has no potential to alter

LSE Screening or AA Stage	Habitats Site	Relevant Impact Pathways in the Construction, Operational and Decommissioning Phases	Screening Decision	Rationale - potential for new or different LSEs and AA conclusions compared to Original HRA arising from Proposed Development Changes
				the conclusions of no adverse effects on the integrity of the Teesmouth & Cleveland Coast SPA/Ramsar regarding this impact pathway.
	Southern North Sea SAC	Disturbance in functionally linked habitat (construction/decommissioning)	Out	The Original HRA discussed the potential for disturbance to harbour porpoise as a result of Unexploded Ordnance (UXO) detonations. However, Proposed Development Change 4 does not involve any preparatory in-water works and, therefore, has no potential to alter the conclusions of no adverse effects on the integrity of the Southern North Sea SAC regarding this impact pathway.
	Teesmouth & Cleveland Coast SPA/Ramsar	Effects on foraging resources of SPA / Ramsar birds (operation)	Out	Proposed Development Change 4 has no potential to alter the conclusions of no adverse effects on the integrity of the Teesmouth & Cleveland Coast SPA/Ramsar regarding the new outfall head and the installation of the associated rock armouring for scour protection.
	North York Moors SAC/SPA	Atmospheric pollution (operation)	Out	Proposed Development Change 4 is not associated with the operational emission of atmospheric pollutants and, therefore, has no potential to alter the conclusions of no adverse effects on the integrity of the North

LSE Screening or AA Stage	Habitats Site	Relevant Impact Pathways in the Construction, Operational and Decommissioning Phases	Screening Decision	Rationale - potential for new or different LSEs and AA conclusions compared to Original HRA arising from Proposed Development Changes
				York Moors SAC/SPA regarding this impact pathway.

3.2.1 The screening assessment has identified that the Proposed Development Changes will not result in LSEs or change the Appropriate Assessment conclusions.



## 4. In Combination Assessment

### 4.1 Introduction

- 4.1.1 This chapter of the HRA Addendum assesses the implications of the Proposed Development Changes for the 'in combination' assessment in the Original HRA as amended (most recently in August 2023) [REP 12-120]. The chapter then provides an in combination assessment for the Proposed Development Changes in isolation from the Proposed Development.
- 4.1.2 The below paragraphs provide a summary of how the Proposed Development Changes will affect the previously assessed impact pathways and provisions contained within the Order. It is emphasised that the avoidance and mitigation measures included in the Order are deemed to be acceptable by the Secretary of State. As such there will be no potential for adverse effects on the integrity of any Habitats sites alone or in combination.

### 4.2 Scope and Methodology

- 4.2.1 A screening assessment has been completed to determine whether the Proposed Development Changes would alter the outcomes of the Original HRA (as amended). The conclusions of the Original HRA (as amended) are listed in the below sections along with the effect of the Proposed Development Changes.
- 4.2.2 The impact pathways below are the four impact pathways through which in combination effects could arise from the DCO. This section of the document therefore considers whether the Original HRA in combination assessment would be altered by the Proposed Development Changes.

### 4.3 Changes to the Original HRA (as amended)

#### Water Quality

- 4.3.1 As detailed in the Original HRA (as amended) [REP 12-120] impacts relating to water quality were considered. The Order includes avoidance and mitigation measures such as designing the NZT project to reduce impacts, compliance with industry good practice and environmental legislation during construction, decommissioning and operation, the implementation of a CEMP, Water Management Plan (WMP), and the minimisation of surface or underground water flow into the ponds of the Coatham Dunes units of the Teesmouth and Cleveland Coast SSSI during construction and decommissioning. Further specific mitigation detail is identified in Chapter 9: Surface Water, Flood Risk and Water Resources (ES Volume I, Document Ref. 6.2).



- 4.3.2 The Original HRA concluded that no adverse effects on the integrity would result in isolation or in combination, and this conclusion remains the case following inclusion of the four Proposed Development Changes as set out in Section 3. Since the Proposed Development Changes do not alter the impacts of the Proposed Development consented under the DCO on Habitats sites, they will not affect the conclusions of the 'in combination' assessment with other plans or projects for the topic of Water Quality.

### Air Quality (Including Dust)

- 4.3.3 As detailed in the Original HRA [REP12-120], impacts relating to air quality were subject to appropriate assessment. This was primarily in relation to impacts stemming from the carbon capture absorber stack from nitrogen deposition impacting the avocet and nesting tern habitats which are almost 2km from the PCC at their closest. Ultimately the Original HRA was able to conclude that adverse effects on integrity would arise either in isolation or in combination. The DCO was granted on this basis. The CEMP required under the Order identifies that dust emissions will be controlled by using appropriate standard and best practice control measures.
- 4.3.4 This conclusion remains the case following inclusion of the four Proposed Development Changes as set out in Section 3. Since the Proposed Development Changes do not alter the impacts of the Proposed Development consented under the DCO on Habitats sites, they will not affect the conclusions of the 'in combination' assessment with other plans or projects for Air Quality.

### Functionally Linked Land

- 4.3.5 The Original HRA of the Order identified that the Order will not result in direct loss of Functionally Linked Land (FLL). This conclusion remains the case following inclusion of the Proposed Development Changes as set out in Section 3. As such this is not a realistic impact pathway that requires in combination consideration.

### Disturbance (Noise and Visual)

- 4.3.6 The Original HRA of the consented Order identified that noise disturbance impacts on the qualifying bird species in the Teesmouth and Cleveland Coast SPA & Ramsar during construction and decommissioning could potentially result in likely significant effects. This was mainly due to the proximity of the PCC site to the feeding, roosting and loafing pools in the dune systems of the SPA / Ramsar (specifically the area of revegetated slag and associated pools immediately north of the PCC Site) that support a population of non-breeding redshank. Following noise modelling it was identified that areas of the SPA utilised by birds would likely be subject to disturbing noise levels. The Order Framework CEMP [REP9-007], includes details to reduce noise impacts upon sensitive bird species. These include (but are not limited to) ensuring acceptable noise levels at receptors are adhered to, applying noise limiting measures wherever practicable, fabricating building elements off-site



wherever practicable, and using visual screens for works that could result in visual disturbance within the SPA and Ramsar site.

- 4.3.7 With these measures in place, it was concluded that no adverse effects on the integrity of the Teesmouth and Cleveland Coast SPA & Ramsar designated bird species would result in isolation or in combination. This conclusion remains the case following inclusion of the four Proposed Development Changes as set out in Section 3. Since the Proposed Development Changes do not alter the impacts of the Proposed Development consented under the DCO on Habitats sites, they will not affect the conclusions of the 'in combination' with other plans or projects.

## 4.4 In Combination Assessment of the Proposed Development Changes in Isolation

- 4.4.1 Having considered whether each of the Proposed Development Changes will change the conclusions of the Original HRA and In Combination Assessment, the potential cumulative impact of the four changes in isolation from the Proposed Development has also been considered.
- 4.4.2 Three of the Proposed Development Changes add small parcels of land into the Order Limits or amend the use of land within the Order Limits. None of those parcels of land have value for birds associated with Teesmouth & Cleveland Coast SPA, nor do they change the scope for water quality or air quality impacts, or materially change the noise envelope of the consented Proposed Development regarding ecological receptors.
- 4.4.3 The fourth change is located within the Main Site. For the purposes of the Original HRA, construction was assumed to take place up to the boundaries of the Main Site as a precaution.
- 4.4.4 Cumulatively the Proposed Development Changes will therefore not alter the conclusions of the Original HRA and will not result in any potential likely significant cumulative effects with any other development.

## 4.5 Residual Effects and Conclusions

- 4.5.1 As detailed in the section above, the Proposed Development Changes will not affect the conclusions of the Original HRA (as amended) and there will be no changes in likely impact pathways or provisions as a result of the Proposed Development Changes.
- 4.5.2 Therefore, since the Proposed Development Changes do not alter the impacts of the DCO on Habitats sites, they will not affect the conclusions of the 'in combination' with other plans or projects.



## 5. Summary

- 5.1.1 This DCO HRA Addendum has identified how the Proposed Development Changes affect the content, scope and conclusions of the Original HRA submitted as part of the DCO Application.
- 5.1.2 The Proposed Development Changes will not alter the outcome presented in the Original HRA.
- 5.1.3 Therefore, there will be no adverse effects on the integrity of the Order or Proposed Development Changes on any Habitats sites either alone or in combination with other plans or projects.