Date: 22 February 2023

Our ref: 419443 Your ref: EN010120



Customer Services Hornbeam House Crewe Business Park Electra Way Crewe Cheshire CW1 6GJ

T 0300 060 3900

The Planning Inspectorate Major Applications & Plans Temple Quay House Temple Quay Bristol BS1 6PN

DraxBECCS@planninginspectorate.gov.uk

BY EMAIL ONLY

Dear Sir/Madam,

NSIP Reference Name / Code: EN010120

Title: Natural England's comments in respect of Drax Bioenergy with Carbon Capture and Storage Project, promoted by Drax Power Limited

Examining authority's submission deadline 22 February 2023

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

For any further advice on this consultation please contact the case officer Alice Megaw at @naturalengland.org.uk and copy to consultations@naturalengland.org.uk.

Yours faithfully

Alice Megaw

Yorkshire and Northern Lincolnshire Area Team

Natural England's Written Representations Version 1.1.

PART I: Summary and Conclusions of Natural England's advice

PART II: Natural England's detailed advice (starting on page 9)

PART III: Natural England's response to the Examining Authority's (ExA's) first written questions

(starting on page 31)

PART IV: Natural England's detailed comments on the draft Development Consent Order (DCO)

(starting on page 42)

Summary of Natural England's Advice

Natural England's advice is that, in relation to identified nature conservation issues within its remit, there is no fundamental reason of principle why the project should not be permitted. However, Natural England considers that the applicant has provided insufficient evidence and is not yet satisfied that the following issues have been resolved:

• Internationally and nationally designated sites

- Impacts from potential loss of functionally linked land (Construction phase) ('amber').
- Impacts of acid deposition from aerial emissions (Operation phase) ('amber').
- Impacts of nitrogen deposition from aerial emissions (Operation phase) ('amber').
- Impacts of ammonia from aerial emissions (Operation phase) ('amber').
- Proposed mitigation for aerial emissions (Operation phase) ('amber').

Protected species

- Further information is required to determine that the project will not adversely affect badgers ('amber').

Biodiversity net gain (BNG)

- Additional information is required to demonstrate that a 10% biodiversity net gain will be achieved ('amber').
- The river BNG units do not achieve net gain in either of the scenarios presented ('amber').
- The Habitat Provision Area within the order limits should be included as on-site in the Biodiversity Net Gain Assessment, and therefore subject to 10% net gain ('amber').

We welcome the further information provided by the Applicant since submission of our Relevant Representations (AS-011) (Version 1.2, dated 23 September 2022) and consider that the following issues have now been resolved, subject to the completion of agreed revisions to the Habitats Regulations Assessment (HRA) for internationally designated sites issues, and subject always to the appropriate requirements being adequately secured for all relevant issues:

Internationally and nationally designated sites

- Impacts from traffic emissions to air (Construction phase) ('green').
- Clarification on scenarios used to assess the impacts from aerial emissions (Operation phase) ('green').

· Protected species

- Further information has been provided to determine that the project will not adversely affect bat species ('green').

Biodiversity net gain (BNG)

- Clarity has been provided regarding impacts to habitats identified as habitats of principal importance (HPI) ('green').

Soils and best and most versatile agricultural land

- The Agricultural Land Classification (ALC) Grade will be calculated for all agricultural land subject to development or disturbance ('green').
- Additional information has been provided regarding the Environmental Statement Chapter 11 Ground Conditions – EIA Methodology ('green').
- Additional information will be provided regarding sustainable soil management in the Soil Handling Management Plan ('green').

Part I: Summary and Conclusions of Natural England's advice

Introduction

- 1.1. Natural England's advice in these Written Representations is based on information submitted by Drax Power Limited in support of its application for a Development Consent Order ('DCO') in relation to Drax Bioenergy with Carbon Capture and Storage Project ('the project').
- 1.2. Part I of these Written Representations provides a summary of Natural England's advice. This advice identifies whether any progress in resolving issues has been made since submission of our Relevant Representations (AS-011).
- 1.3. Part II of these Written Representations updates and where necessary augments Part II of the Relevant Representations (AS-011). It expands upon the detail of all the significant issues ('amber' issues) which, in our view remain outstanding and includes our advice on pathways to their resolution where possible. Part II also shows 'green' issues which have been agreed since our Relevant Representations ((AS-011) (subject always to the appropriate requirements being secured adequately).
- 1.4. Part III of these Written Representations details Natural England's response to the Examining Authority's (ExA's) first written questions.
- 1.5. Part IV of these Written Representations details Natural England's comments on the draft Development Consent Order (DCO) and associated documents.
- 1.6. Our comments are set out against the following sub-headings which represent our key areas of remit:
 - Internationally designated sites
 - Nationally designated sites
 - Protected species
 - Biodiversity net gain
 - Soils and best and most versatile agricultural land
- 1.7. Our comments are flagged as red, amber or green:
 - Red are those where there are <u>fundamental concerns</u> which it may not be possible to overcome in their current form.
 - Amber are those where <u>further information</u> is required to determine the effects of the project and allow the Examining Authority to properly undertake its task and or advise that further information is required on mitigation/compensation proposals in order to provide a sufficient degree of confidence as to their efficacy.
 - Green are those which have been <u>successfully resolved</u> (subject always to the appropriate requirements being adequately secured).
- 1.8. Natural England has been working with Drax Power Limited and WSP, on behalf of Drax Power Limited, to provide advice and guidance since 2021 through statutory consultations and via Natural England's Discretionary Advice Service.

1.9. Natural England will continue discussions with WSP, on behalf of Drax Power Limited, to seek to resolve these concerns throughout the examination. Natural England advises that the matters indicated as 'amber' will require continued consideration by the Examining Authority during the examination.

2. The natural features potentially affected by this application

Internationally designated sites

- 2.1. Natural England's position regarding impacts on internationally designated sites has changed since submission of our Relevant Representations Version 1.2 (AS-011)). Our position regarding impacts on internationally designated sites from the Proposed Changes (PC-02) is as set out in our Relevant Representation for PC-02 (submitted online, dated 09 February 2023).
- 2.1.1. Our updated advice regarding impacts on internationally designated sites on the basis of further information submitted is set out below. Further detail on our reasoning for this is given against each impact pathway within Part II.
- 2.1.2. Natural England is not yet satisfied for 'amber' issues identified in the text below that it can be ascertained beyond reasonable scientific doubt that the project would not have an adverse effect on the integrity of the following internationally designated sites:
 - Lower Derwent Valley Special Area of Conservation (SAC)
 - Lower Derwent Valley Ramsar
 - Humber Estuary Special Area of Conservation (SAC)
 - Humber Estuary Special Protection Area (SPA)
 - Humber Estuary Ramsar
 - River Derwent Special Area of Conservation (SAC)
 - Skipwith Common Special Area of Conservation (SAC)
 - Thorne Moor Special Area of Conservation (SAC)
- 2.1.3. Further information is required to assess the following impact pathways:
 - 2.1.3.1. Impacts of acid deposition from aerial emissions (Operation phase) on Lower Derwent Valley SAC/Ramsar designated features ('amber').
 - 2.1.3.2. Impacts of nitrogen deposition from aerial emissions (Operation phase) on Thorne Moor SAC and River Derwent SAC designated features ('amber').
 - 2.1.3.3. Impacts of ammonia from aerial emissions (Operation phase) on Thorne Moor SAC ('amber').
 - 2.1.3.4. Proposed mitigation for aerial emissions (Operation phase) on Lower Derwent Valley SAC/Ramsar; Thorne Moor SAC; River Derwent SAC; and Skipwith Common SAC designated features ('amber').

- 2.1.3.5. Impacts from potential loss of functionally linked land (Construction phase) associated with Humber Estuary SPA/Ramsar in the areas comprising the overhead line (OHL) and Telecommunications line (TCL) Order Limits for Proposed Change 02 (PC-02) ('amber').
- 2.1.4. Natural England is now satisfied that 'green' issues are unlikely to result in adverse effects on the integrity (AEoI) of the following internationally designated sites, subject to the completion of agreed revisions to the Habitats Regulations Assessment (HRA) and subject always to appropriate mitigation as outlined in the application documents being secured adequately:
 - 2.1.4.1. Impacts from potential loss of functionally linked land (Construction phase) associated with Humber Estuary SPA/Ramsar and Lower Derwent Valley SPA/Ramsar in the off-site habitat provision area ('green').
 - 2.1.4.2. Impacts from construction traffic emissions to air (Construction phase) on Humber Estuary SAC/SPA/Ramsar designated features ('green').
 - 2.1.4.3. Clarification on scenarios used to assess the impacts from aerial emissions (Operation phase) on Humber Estuary SPA/SAC; Lower Derwent Valley SAC/SPA/Ramsar; Thorne Moor SAC; River Derwent SAC and Skipwith Common SAC designated features ('green').

Nationally designated sites

- 2.2. Natural England's position regarding nationally designated sites has changed since submission of our Relevant Representations Version 1.2 (AS-011)). Our position regarding impacts on nationally designated sites from the Proposed Changes (PC-02) is as set out in our Relevant Representation for PC-02 (submitted online, dated 09 February 2023).
- 2.2.1. On the basis of the information submitted in relation to these sites, Natural England is not yet satisfied that the project is not likely to damage features of interest of the following nationally designated sites:
 - Breighton Meadows Site of Special Scientific Interest (SSSI)
 - Derwent Ings SSSI
 - Humber Estuary SSSI
 - River Derwent SSSI
 - Eskamhorn Meadows SSSI
 - Barn Hill Meadows SSSI
 - Burr Closes SSSI
 - Thorne, Crowle, and Goole Moors SSSI
- 2.2.2. Further information is required to assess the following impact pathways:
 - 2.2.2.1. Impacts of acid deposition from aerial emissions (Operation phase) on Barn Hill Meadows, Breighton Meadows SSSI; Derwent Ings SSSI; and Melbourne and Thornton Ings SSSI ('amber').
 - 2.2.2.2. Impacts of nitrogen deposition from aerial emissions (Operation phase) on Thorne, Crowle, and Goole Moors SSSI; and River Derwent SSSI ('amber').

- 2.2.2.3. Impacts of ammonia from aerial emissions (Operation phase) on Thorne, Crowle, and Goole Moors SSSI ('amber').
- 2.2.2.4. Proposed mitigation for aerial emissions (Operation phase) on Barn Hill Meadows SSSI, Breighton Meadows SSSI; Derwent Ings SSSI; Melbourne and Thornton Ings SSSI; Thorne, Crowle, and Goole Moors SSSI; River Derwent SSSI; and Skipwith Common SSSI ('amber').
- 2.1.2.5. Impacts from potential loss of functionally linked land (Construction phase) associated with Humber Estuary SSSI in the areas comprising the overhead line (OHL) and Telecommunications line (TCL) Order Limits for Proposed Change 02 (PC-02) ('amber').
- 2.2.3. Natural England is satisfied that the 'green' issues outlined in 2.1.4 for internationally designated sites are not likely to damage features of interest of the underpinning nationally designated sites (i.e. Derwent Ings SSSI, Melbourne and Thornton Ings SSSI, Humber Estuary SSSI, Skipwith Common SSSI; and River Derwent SSSI), subject to the appropriate mitigation as outlined in the application documents being secured adequately.
- 2.2.4. Natural England is satisfied with the clarification provided on scenarios used to assess the impacts from aerial emissions (Operation phase) on Breighton Meadows SSSI; Eskamhorn Meadows SSSI; Barn Hill Meadows SSSI; Burr Closes SSSI; and Went Ings Meadows SSSI ('green').

Protected species

- 2.3. Natural England's position regarding European and nationally protected species has changed since submission of our Relevant Representations Version 1.2 (AS-011)).
- 2.3.1. Our updated advice regarding impacts on protected species on the basis of further information submitted is set out below. Further detail on our reasoning for this is given against each impact pathway within Part II.
- 2.3.2. On the basis of the information submitted, Natural England is not yet satisfied that the project will not adversely affect the following nationally protected species: badger ('amber').
- 2.3.3. On the basis of the information submitted, Natural England is satisfied that the project will not adversely affect the following European protected species (EPS): bat species ('green')

Biodiversity Net Gain

- 2.4. Natural England's position regarding provision of biodiversity net gain has changed since submission of our Relevant Representations Version 1.2 (AS-011)).
- 2.4.1. On the basis of the information submitted, Natural England is not yet satisfied with the following Biodiversity Net Gain (BNG) issues:
 - 2.4.1.1. Additional information should be provided to demonstrate that a 10% biodiversity net gain will be achieved ('amber').

- 2.4.1.2. Natural England notes that river BNG units achieve no get gain in either of the scenarios currently presented ('amber').
- 2.4.1.3. The Habitat Provision Area within the order limits should be included as on-site in the Biodiversity Net Gain Assessment, and therefore subject to 10% net gain ('amber').
- 2.4.2. On the basis of the information submitted, Natural England is now satisfied that 'green' issues regarding BNG have been adequately resolved, subject to the appropriate measures as outlined in the application documents being secured:
 - 2.4.2.3. Clarity has been provided regarding impacts to habitats identified as habitats of principal importance (HPI) ('green').

Soils and best and most versatile agricultural land

- 2.5. Natural England's position regarding soils and the best and most versatile agricultural land has changed since submission of our Relevant Representations Version 1.2 (AS-011)).
- 2.5.2. On the basis of the information submitted, Natural England is now satisfied that 'green' issues regarding soils and the best and most versatile agricultural have been adequately resolved, subject to the appropriate measures as outlined in the application documents being secured:
 - 2.5.2.1. The Agricultural Land Classification (ALC) Grade will be calculated for all agricultural land subject to development or disturbance ('green').
 - 2.5.2.2. Additional information has been provided regarding the Environmental Statement Chapter 11 Ground Conditions EIA Methodology ('green').
 - 2.5.2.3. Additional information will be provided regarding sustainable soil management in the Soil Handling Management Plan ('green').

Natural England's Written Representations

4. Part II: Natural England's detailed advice

- 4.1. Part II of these representations updates and where necessary augments Part II of the Relevant Representations. It expands upon the detail of all the significant issues ('red' and 'amber' issues) which, in our view remain outstanding and includes our advice on pathways to their resolution where possible. Part II also shows 'green' issues which have been agreed since our Relevant Representations Version 1.2 (AS-011) (subject always to the appropriate requirements being secured adequately).
- 4.1.2. Natural England's advice is that there are a number of matters which have not been resolved satisfactorily since the submission of our Relevant Representations Version 1.2 (AS-011), as summarised in Part I, Section 2 above and outlined in further detail in Table 1 below.
- 4.1.3. Some of these matters are important enough to mean that if they are not satisfactorily addressed it would not be lawful to permit the project due to its impacts on the SAC, SPA, Ramsar and SSSI interests. However, Natural England's advice is that all of these matters are capable of being overcome. The specific concerns in relation to each are detailed in Table 1.
- 4.1.4. Natural England advises that, if approved, the project must be subject to all necessary and appropriate requirements which ensure that unacceptable environmental impacts either do not occur or are sufficiently mitigated.
- 4.1.5. Natural England will continue engaging with the applicant to seek to resolve outstanding concerns throughout the examination.

Natural England's Written Representations, Part II, Table 1

Table 1: Na	tural England's det	ailed advice			
Natural England key issue reference	Topic	(C) – construction phase (O) – operational phase	Natural England commentary and advice on the further information required to enable assessment	Natural England comment on the mechanism for securing mitigation/ compensation measures in the DCO	Risk
19	Internationally designated sites	Impacts of acid deposition from aerial emissions on Lower Derwent	At this stage, Natural England's position broadly remains as set out in our Relevant Representations Version 1.2 (AS-011)).	Natural England considers that monitoring, recording and reporting to the regulator (Environment Agency) as part of the future environmental permit is appropriate to ensure	Amber

	Lower Derwent Valley SAC Lower Derwent Valley Ramsar	Valley SAC/Ramsar designated features (alone and incombination). (O)	Discussions with the Applicant are ongoing on this matter. Natural England are waiting for an updated air quality assessment including additional emissions reductions, which is currently being prepared by the Applicant. We note that the justification provided in the current Habitats Regulations Assessment (HRA, dated May 2022) (e.g., 4.2.173 onwards for the project alone and 4.3.29 onwards for the project in-combination) largely relate to the modelling assumptions used, the small scale of the impact, and the overall "favourable" condition of the site. However, while these points are relevant, we highlight that justification should also make reference to site-specific considerations, and the relevant conservation objectives of the designated sites (as detailed in our relevant representation).	emissions from the plant itself remain within the assumed emissions used in the assessments. We recommend that monitoring of the protected sites should also be carried out for acid deposition. This requirement should be secured by the DCO or permit variation application (outlining proposed mitigation measures and a detailed monitoring plan). Natural England advises that the requirement for additional mitigation measures and approach to securing such measures will depend on the outcome of the updated air quality assessment including additional emissions reductions, which is currently being prepared by the Applicant.	
20	Internationally designated sites	Impacts of nitrogen deposition from aerial emissions on Thorne Moor SAC (in-combination) and River Derwent SAC designated features (alone and incombination) (O)	Thorne Moor SAC At this stage, Natural England's position broadly remains as set out in our Relevant Representations Version 1.2 (AS-011)). Discussions with the Applicant are ongoing on this matter. Natural England are waiting for an updated air quality assessment including additional emissions reductions, which is currently being prepared by the Applicant.	Natural England considers that monitoring, recording and reporting to the regulator (Environment Agency) as part of the future environmental permit is appropriate to ensure emissions from the plant itself remain within the assumed emissions used in the assessments. We recommend that monitoring of the protected sites should also be carried out for nitrogen deposition. This requirement should be secured by the DCO or permit variation	Amber

Based on the additional information provided in the Applicant's Response to Relevant Representations and Additional Submissions [AS-038], Natural England accepts that that the applicant has used other evidence within NECR210 to consider the impact of nitrogen deposition. However, no additional evidence is used in the assessment of potential impacts of the project on Thorne Moor SAC specifically. For example, consideration should be taken of the relevant habitats and important species, the predicted pollution footprint, trends in nitrogen deposition in the area.

Although the predicted contribution of nitrogen is acknowledged to be small, given critical loads are exceeded in-combination and there is a "restore" conservation objective for air quality at the site, it is important to establish if the proposed development will undermine the ability to deliver this objective. In particular, APIS records nitrogen deposition to have increased in the area recently. Therefore, we advise that further detailed assessment is carried out to determine whether an adverse effect on integrity from any additional input can be excluded.

River Derwent SAC

At this stage, Natural England's position broadly remains as set out in our Relevant Representations Version 1.2 (AS-011)).

application (outlining proposed mitigation measures and a detailed monitoring plan).

Natural England advises that the requirement for additional mitigation measures and approach to securing such measures will depend on the outcome of the updated air quality assessment including additional emissions reductions, which is currently being prepared by the Applicant.

			Natural England are waiting for an updated air quality assessment including additional emissions reductions, which is currently being prepared by the Applicant. We are involved in ongoing conversations with the Applicant regarding the assessment of impacts of nitrogen deposition from aerial emissions on the River Derwent SAC. We have recently received an additional Technical Note from the Applicant regarding the River Derwent SAC. However, Natural England have been unable to complete a review of this information in the absence of the anticipated updated air quality assessment prior to the Written Representations deadline. Therefore, we will continue to engage with the Applicant on this matter.		
21	Internationally designated sites • Thorne Moor SAC	Impacts of ammonia from aerial emissions on Thorne Moor SAC designated features (in-combination).	At this stage, Natural England's position remains as set out in our Relevant Representations Version 1.2 (AS-011)). Discussions with the Applicant are ongoing on this matter. Natural England are waiting for an updated air quality assessment including additional emissions reductions, which is currently being prepared by the Applicant. We are awaiting further assessment in the HRA and highlight that the appropriate assessment should present evidence that the conservation objectives of the site will not be undermined by the proposed	Natural England considers that monitoring, recording and reporting to the regulator (Environment Agency) as part of the future environmental permit is appropriate to ensure emissions from the plant itself remain within the assumed emissions used in the assessments. We recommend that monitoring of the protected sites should also be carried out for ammonia. This requirement should be secured by the DCO or permit variation application (outlining proposed mitigation measures and a detailed monitoring plan).	Amber

			development. This is particularly important given the background levels of ammonia exceed the critical level of 1µg/m³ incombination and there is no declining trend.	Natural England advises that the requirement for additional mitigation measures and approach to securing such measures will depend on the outcome of the updated air quality assessment including additional emissions reductions, which is currently being prepared by the Applicant.	
22	Internationally designated sites Lower Derwent Valley SAC and Ramsar Thorne Moor SAC River Derwent SAC Skipwith Common SAC	Proposed mitigation for impacts of aerial emissions on Lower Derwent Valley SAC/Ramsar; Thorne Moor SAC; River Derwent SAC; and Skipwith Common designated features. (O)	Natural England welcomes the further information provided on the proposed operational emissions abatement mitigation and its implementation in 5.34 of Table 5.1 in the Applicant's Responses to Relevant Representations and Additional Submissions document (AS-038). We accept the justification provided regarding the proposed technology to be used to achieve the operational emissions abatement and the measures for securing the currently proposed mitigation for operational emissions. The reduction in permitted concentrations of sulphur dioxide is noted, and that the realistic worst-case scenario is based on these revised permit limits. We remain in discussion with the Applicant regarding the assessment of effects of operational emissions on some designated sites, and hence the need for additional mitigation cannot be ruled out at this point in	Natural England considers that monitoring, recording and reporting to the regulator (Environment Agency) as part of the future environmental permit is appropriate to ensure emissions from the plant itself remain within the assumed emissions used in the assessments. We recommend that monitoring of the protected sites should also be carried out for identified pollutants (acid and nitrogen deposition, and ammonia). This requirement should be secured by the DCO or permit variation application (outlining proposed mitigation measures and a detailed monitoring plan). Natural England advises that the requirement for additional mitigation measures and approach to securing such measures will depend on the outcome of the updated air quality assessment including additional emissions reductions, which is currently being prepared by the Applicant.	Amber

			time. Natural England notes that the Applicant is preparing further information regarding additional emissions abatement, and looks forward to receiving this in due course.		
27	Internationally designated sites • Humber Estuary SPA • Humber Estuary Ramsar	Impacts from potential loss of functionally linked land (Construction phase) associated with Humber Estuary SPA/Ramsar in the overhead line (OHL) and Telecommunications line (TCL) Order Limits for Proposed Change 02 (PC-02).	Our position regarding impacts on internationally designated sites from the Proposed Changes (PC-02) is as set out in our Relevant Representation for PC-02 (submitted online, dated 09 February 2023). Table 6-1 Environmental Appraisal for PC-02 (8.5.1 Proposed Changes Application Report) states that "The areas comprising the [overhead line] OHL and [Telecommunications line] TCL Order Limits are not in proximity to any statutory or nonstatutory designated sites, nor are there evident impact pathways connecting the areas where construction works would take place with such protected sites, that are predicted to give rise to likely significant effects." However, the OHL and TCL Order Limits are located within 4km of the Humber Estuary SPA/Ramsar, which are designated for mobile bird species that may also rely on areas outside of the site boundary. On the basis of the information provided, Natural England advises that there is currently not enough information to rule out the likelihood of significant effects from loss of/disturbance to functionally linked land associated with the Humber Estuary SPA/Ramsar.	Natural England advises that the requirement for additional mitigation measures will depend on the outcome of the assessment.	Amber

We therefore recommend that further assessment of the potential suitability of the proposed Order Limits and adjacent areas for SPA birds is carried out to inform an update/addendum to the HRA. This should include a data search from appropriate source/s (for example, the local Ecological Data Centre), in addition to a desk-based assessment of aerial photography, mapping, habitat maps and relevant ecological literature, where appropriate.

We note that Table 6-1 of the 8.5.1 **Proposed Changes Application Report** refers to "OHL locations are adjacent to an existing main road and public footpaths, with residential and commercial properties present" and advise that such factors may inform the assessment. However, these factors alone are not considered sufficient justification to rule out likely significant effects from the OHL and TCL in this case. The OHL1/TCL1 are located within a wider network of fields, and the 8.5.3.4 Appendix 4 – Ecological Walkover Technical Note – Proposed Changes gives an indication of the availability of improved grassland and arable land within/in proximity to OHL1/TCL1, which extends beyond the areas immediately adjacent to the road and commercial properties. Therefore, we advise that the potential suitability of the area as functionally linked land should be assessed in more detail.

1	Internationally designated sites Humber Estuary SAC Humber Estuary SPA Humber Estuary Ramsar	Impacts from construction traffic emissions to air on Humber Estuary SAC/SPA/Ramsar designated features (C)	Natural England welcomes the further assessment of potential impacts from construction traffic emissions to air on Humber Estuary designated features in response reference 5.13 and 5.19 of Table 5.1 (Natural England RR Response) in the Applicant's Responses to Relevant Representations and Additional Submissions document (AS-038). We advise that the assessment provided should be included in the revised HRA. Based on the information provided, we agree with the conclusion that likely significant effects on the Humber Estuary SAC/SPA/Ramsar arising from construction traffic from the M62 can be excluded, due to: relatively low traffic numbers (process contributions not exceeding 1% of the relevant critical loads/ levels either alone or in-combination); the temporary nature of the increase in traffic; and the topography of the M62 bridge over the Humber Estuary (as it is raised substantially above ground level, with emissions therefore subject to additional dispersion compared to emissions at ground level). We therefore consider this point to be resolved at this stage.	The measures specified in the Outline Construction Traffic Management Plan (OD- 009) should be included in the updated Construction Traffic Management Plan as part of the Construction Environmental Management Plan (CEMP). The measures specified in T2 of the Register of Environmental Actions and Commitments (REAC) should be included in the Construction Worker Travel Plan (CTWP) and rigorously implemented. Appropriate measures to monitor and manage traffic should be included in the Decommissioning Traffic Management Plan (DTMP), which will be provided prior to Decommissioning.	Green
2	Internationally designated sites	Impacts from potential loss of functionally linked land associated with Lower Derwent	Natural England welcomes the additional information provided in 5.14 of Table 5.1 in the Applicant's Responses to Relevant Representations	N/A	Green

3	SAC Internationally designated sites	Impacts from increased sediment	the mid-merit scenario chosen is a realistic option and assumes greatest potential emissions. No significant impacts from increased sediment load on functionally linked land	The mitigation measures specified in WE8 of the REAC must be included in the Surface	Green
18	Internationally designated sites Humber Estuary SPA and SAC Lower Derwent Valley SAC, SPA and Ramsar Thorne Moor SAC River Derwent SAC Skipwith Common	Clarification on scenarios used to assess the impacts from aerial emissions on Humber Estuary SPA/SAC; Lower Derwent Valley SAC/SPA/Ramsar; Thorne Moor SAC; River Derwent SAC and Skipwith Common SAC designated features.	Natural England welcomes the additional information provided regarding the modelling scenarios in 5.30 and 5.35 of Table 5.1 in the Applicant's Responses to Relevant Representations and Additional Submissions document (AS-038). We advise that the assessment provided is included / referred to in the revised HRA. The summary of the operating scenarios contained at 5.30, and in Appendix B is clear, and explains why the "mid merit" scenario is the realistic worst case and would result in a greater potential impact than the "full load" scenario, due to the inclusion of the electricity generation impact as well as the plume buoyancy and emission profile impacts. It is accepted that	Natural England considers that monitoring, recording and reporting to the regulator (Environment Agency) as part of the future environmental permit is appropriate to ensure emissions from the plant itself remain within the assumed emissions used in the assessments. We recommend that monitoring of the protected sites should also be carried out for identified pollutants (acid and nitrogen deposition, and ammonia). This requirement should be secured by the DCO or permit variation application (outlining proposed mitigation measures and a detailed monitoring plan).	Green
	SPA/Ram sar • Humber Estuary SPA/Ram sar	Valley SPA/Ramsar and Humber Estuary SPA/Ramsar in the off-site habitat provision area. (C)	and Additional Submissions document (AS-038) and the commitment to update the HRA to fully address the comments made. Based on the further information provided, we agree that likely significant effects on the relevant designated sites can be ruled out for potential loss of functionally linked land in the off-site habitat provision area. We therefore consider this point to be resolved at this stage.		

	Lower Derwent Valley SPA/SAC/ Ramsar Humber Estuary SPA/Ram sar River Derwent SAC	load on functionally linked land associated with the Lower Derwent Valley SPA/SAC/Ramsar, Humber Estuary SPA/Ramsar and River Derwent SAC designated features.	are anticipated for the international designated sites listed. Natural England is satisfied that the potential risks to functionally linked land for designated features of the international designated sites, i.e. otter (Lower Derwent Valley SAC and River Derwent SAC) and bird species (Lower Derwent Valley SPA/Ramsar and Humber Estuary SPA/Ramsar) can be adequately mitigated through the measures specified in the Surface Water Management Plan, referenced in WE8 of the REAC. However, there is clearly a dependency that mitigation set out in the REAC will be included in the Surface Water Management Plan, and that these will be rigorously implemented and maintained.	Water Management Plan and rigorously implemented throughout construction, operation and decommissioning. The measures specified in WE1-WE7, WE11, and WE14 – WE15 of the REAC must also be adequately secured. We welcome that the revised draft DCO Schedule 2 Requirement 18 regarding the Decommissioning Environmental Management Plan specifies that "measures set out in the plan submitted under paragraph (1) must be consistent with the principles informing the measures that are set out in the register of environmental actions and commitments."	
4	Internationally designated sites • Lower Derwent Valley SPA/SAC/Ra msar • Humber Estuary SPA/Ram sar • River Derwent SAC	Impacts from accidental releases of water-borne pollutants (Construction and operation phase) on Lower Derwent Valley SAC, River Derwent SAC and Humber Estuary SAC designated features (C) and (O)	No significant impacts from accidental releases of water-borne pollutants are anticipated for the international designated sites listed. Natural England is satisfied that the potential risks for designated features of the international designated sites, i.e. otter (Lower Derwent Valley SAC and River Derwent SAC), river lamprey and sea lamprey (Humber Estuary SAC) can be adequately mitigated through the measures specified in the Surface Water Management Plan, referenced in WE8 of the REAC.	The mitigation measures specified in WE8 of the REAC must be included in the Surface Water Management Plan and rigorously implemented throughout construction, operation and decommissioning. The measures specified in WE1-WE7, WE11, and WE14 – WE15 of the REAC must also be adequately secured. We welcome that the revised draft DCO Schedule 2 Requirement 18 regarding the Decommissioning Environmental Management Plan specifies that "measures set out in the plan submitted under paragraph (1) must be consistent with the principles	Green

			However, there is clearly a dependency that mitigation set out in the REAC will be included in the Surface Water Management Plan, and that these will be rigorously implemented and maintained.	informing the measures that are set out in the register of environmental actions and commitments."	
5	Internationally designated sites • Lower Derwent Valley SPA/SAC/ Ramsar • Humber Estuary SPA/Ram sar • River Derwent SAC	Impacts from dust on functionally linked land associated with the Lower Derwent Valley SPA/SAC/Ramsar, Humber Estuary SPA/Ramsar and River Derwent SAC designated features. (C)	No significant impacts from dust on functionally linked land are anticipated for the international designated sites listed. Natural England is satisfied that the potential risks from dust to functionally linked land for designated features of the international designated sites, i.e. otter (Lower Derwent Valley SAC and River Derwent SAC) and bird species (Lower Derwent Valley SPA/Ramsar and Humber Estuary SPA/Ramsar) can be adequately mitigated through the measures specified in Section 1.3 of Appendix 6.2 (Construction Dust Assessment) of Chapter 6 (Air Quality) in Volume 3 of the ES and AQ1 in the REAC. However, there is clearly a dependency that mitigation set out in the REAC will be included in the CEMP, and that these will be rigorously implemented and maintained.	The mitigation measures specified in AQ1 of the REAC must be included in the CEMP and rigorously implemented. We welcome that the revised draft DCO Schedule 2 Requirement 18 regarding the Decommissioning Environmental Management Plan specifies that "measures set out in the plan submitted under paragraph (1) must be consistent with the principles informing the measures that are set out in the register of environmental actions and commitments."	Green
6	International designated sites	Impacts from visual disturbance on functionally linked land associated with Lower Derwent	No significant impacts from visual disturbance impacts on functionally linked land are anticipated for the international designated sites listed.	The mitigation measures specified in G5, D4 and E4 of the REAC must be included in the CEMP and rigorously implemented. We welcome that the revised draft DCO	Green
	SPA/SAC/ Ramsar	Valley SPA/SAC/Ramsar,	Natural England is satisfied that the potential risks from visual disturbance to	Schedule 2 Requirement 18 regarding the Decommissioning Environmental	

	Humber Estuary SPA/Ram sar River Derwent SAC	Humber Estuary SPA/Ramsar and River Derwent SAC (C)	functionally linked land for designated features of the international designated sites, i.e. otter (Lower Derwent Valley SAC and River Derwent SAC) and bird species (Lower Derwent Valley SPA/Ramsar and Humber Estuary SPA/Ramsar) can be adequately mitigated through the general measures specified in G5 of the REAC, lighting measures in D4 of the REAC (in accordance with the Draft Lighting Strategy), and additional mitigation measures for otter specified in E4 of the REAC. However, there is clearly a dependency that mitigation set out in the REAC will be included in the CEMP and DEMP, and that these will be rigorously implemented and maintained.	Management Plan specifies that "measures set out in the plan submitted under paragraph (1) must be consistent with the principles informing the measures that are set out in the register of environmental actions and commitments."	
24	Nationally designated sites Barn Hill Meadows SSSI Breighton Meadows SSSI Derwent Ings SSSI	Impacts of acid deposition from aerial emissions on Barn Hill Meadows SSSI, Breighton Meadows SSSI, Derwent Ings SSSI (alone and incombination) (O)	At this stage, Natural England's position broadly remains as set out in our Relevant Representations Version 1.2 (AS-011)). Discussions with the Applicant are ongoing on this matter. Our advice regarding the potential impacts of acid deposition from aerial emissions of on the Breighton Meadows SSSI and Derwent Ings SSSI coincides with our advice regarding the potential impacts upon the Lower Derwent Valley SAC as detailed above (Natural England key issue reference 19).	Natural England's advice regarding mitigation measures coincides with our advice regarding Lower Derwent Valley SAC/Ramsar as detailed above (Natural England key issue reference 19).	Amber

			We would highlight that the potential impact of acid deposition on nationally designated sites (SSSIs) would be the same as for a similar habitat designated as a European Habitat Site (SAC, SPA, Ramsar). However, it is acknowledged that a higher threshold for harm has historically been applied to SSSIs. There is no scientific evidence to suggest differing thresholds for harm are appropriate for the same habitat type as a result of the level of designation that site has received. We therefore advise that similar consideration is given to the assessment of potential impacts of acid deposition from aerial emissions on Barn Hill Meadows SSSI (which does not underpin a European designation) as the Lower Derwent Valley SAC as detailed above (Natural England key issue reference 19) and underpinning SSSIs (Breighton Meadows SSSI and Derwent Ings SSSI).		
25	Nationally designated sites	Impacts of nitrogen deposition from aerial emissions on Thorne, Crowle, and Goole Moors SSSI (in-combination); and River Derwent SSSI (alone and incombination).	Our advice regarding the potential impacts of nitrogen deposition from aerial emissions upon the Thorne, Crowle, and Goole Moors SSSI and River Derwent SSSI coincides with our advice regarding the potential impacts upon the Thorne Moor SAC and River Derwent SAC as detailed above (Natural England key issue reference 20).	Natural England's advice regarding mitigation measures coincides with our advice regarding Lower Derwent Valley SAC/Ramsar as detailed above (Natural England key issue reference 20).	Amber

26	Nationally designated sites Barn Hill Meadow Breighton Meadows SSSI Derwent Ings SSSI Melbourne and Thornton Ings SSSI Thorne, Crowle, and Goole Moors SSSI River Derwent SSSI Skipwith Common SSSI.	Proposed mitigation for impacts of aerial emissions on Barn Hill Meadows; Breighton Meadows SSSI; Derwent Ings SSSI; Melbourne and Thornton Ings SSSI; Thorne, Crowle, and Goole Moors SSSI; River Derwent SSSI; and Skipwith Common SSSI.	Our advice regarding proposed mitigation for impacts of aerial emissions on Breighton Meadows SSSI; Derwent Ings SSSI; Melbourne and Thornton Ings SSSI; Thorne, Crowle, and Goole Moors SSSI; River Derwent SSSI; and Skipwith Common SSSI coincides with our advice regarding Lower Derwent Valley SAC/Ramsar; Thorne Moor SAC; River Derwent SAC; and Skipwith Common SAC (Natural England key issue reference 22). This assessment should also consider additional relevant nationally designated site Barn Hill Meadows SSSI.	Natural England's advice regarding mitigation measures coincides with our advice regarding Lower Derwent Valley SAC/Ramsar as detailed above (Natural England key issue reference 22).	Amber
28	Nationally designated sites • Humber Estuary SSSI	Impacts from potential loss of / disturbance to functionally linked land associated with Humber Estuary SSSI in the overhead line (OHL) and Telecommunications line (TCL) Order	Our advice regarding the impacts from potential loss of / disturbance to functionally linked land associated with Humber Estuary SSSI coincides with our above advice regarding the Humber Estuary SPA/Ramsar (Natural England key issue reference 27).	Natural England advises that the requirement for additional mitigation measures will depend on the outcome of the assessment.	Amber

7	Nationally designated sites (biodiversity & geodiversity) Humber Estuary SSSI	Limits for Proposed Change 02 (PC-02). Impacts from traffic emissions to air on Humber Estuary SSSI (C)	Our advice regarding the potential impacts from traffic emissions to air on Humber Estuary SSSI coincide with our advice regarding the potential impacts upon the Humber Estuary SAC/SPA/Ramsar, as detailed above (Natural England key issue reference 1).	Natural England's advice coincides with our advice above for Natural England key issue reference 1.	Green
8	Nationally designated sites (biodiversity & geodiversity) Breighton Meadows SSSI Derwent Ings SSSI Melbourne and Thornton Ings SSSI Humber Estuary SSSI	Impacts from potential loss of functionally linked land associated with Breighton Meadows SSSI, Derwent Ings SSSI, Melbourne and Thornton Ings SSSI and Humber Estuary SSSI in the off-site habitat provision area. (C)	Our advice regarding the potential impacts from loss of functionally linked land associated with Breighton Meadows SSSI, Derwent Ings SSSI, Melbourne and Thornton Ings SSSI and Humber Estuary SSSI in the off-site habitat provision area coincide with our advice regarding the potential impacts upon the Lower Derwent Valley SPA/Ramsar and Humber Estuary SPA/Ramsar (Natural England key issue reference 2).	Natural England's advice coincides with our advice above for Natural England key issue reference 2.	Green
23	Nationally designated sites • Breighton Meadows SSSI	Clarification on scenarios used to assess the impacts from aerial emissions on Breighton Meadows	Our advice regarding the scenarios used to assess the impacts from aerial emissions on Breighton Meadows SSSI; Derwent Ings SSSI; Melbourne and Thornton Ings SSSI; Humber Estuary SSSI; River Derwent SSSI; Eskamhorn Meadows SSSI; Barn Hill	Natural England's advice coincides with our advice above for Natural England key issue reference 18.	Green

 Derwent 	SSSI; Derwent Ings	Meadows SSSI; Burr Closes SSSI; Thorne,	
Ings SSSI	SSSI; Melbourne	Crowle, and Goole Moors SSSI; and	
 Melbourne 	and Thornton Ings	Skipwith Common SSSI	
and	SSSI; Humber	coincides with our above advice regarding	
Thornton	Estuary SSSI; River	the Humber Estuary SPA/SAC; Lower	
Ings SSSI	Derwent SSSI;	Derwent Valley SAC/SPA/Ramsar; Thorne	
Humber	Eskamhorn	Moor SAC; River Derwent SAC and	
Estuary	Meadows SSSI;	Skipwith Common SAC (Natural England	
SSSI	Barn Hill Meadows	key issue reference 18).	
	SSSI; Burr Closes	Roy loods fororons 15).	
	SSSI; Thorne,	This clarification also applies to additional	
Derwent SSSI	Crowle, and Goole	relevant nationally designated sites	
	Moors SSSI; and	Eskamhorn Meadows SSSI, Barn Hill	
 Eskamhor 	Skipwith Common	Meadows SSSI and Burr Closes SSSI.	
n Maadana	SSSI.	Therefore, this point is now considered to	
Meadows	000	be resolved.	
SSSI	(O)	50 10001100.	
Barn Hill	(3)		
Meadows			
SSSI			
• Burr			
Closes			
SSSI			
 Thorne, 			
Crowle,			
and Goole			
Moors			
SSSI			
 Skipwith 			
Common			
SSSI			
 Thorne 			
Crowle			
and Goole			
Moors			
SSSI			

	Went Ings Meadows SSSI				
9	Protected Species	Badger (C)	Natural England welcomes the further information provided in Table 5.1 (Natural England RR Response) in the Applicant's Responses to Relevant Representations and Additional Submissions document (AS-038). Natural England is now satisfied that preconstruction surveys proposed in relation to badger are appropriate. However, Natural England are aware that further badger surveys have been carried out and we are yet to review these results and proposed approach; therefore, we cannot confirm whether this topic is resolved at this stage. We advise that the requirement for a draft licence application will depend on the outcome of the badger surveys.	Natural England advises that the requirement for a draft licence application will depend on the outcome of the pre-construction badger surveys. The surveys specified in E3 of the REAC must be included in the CEMP and rigorously implemented.	Amber
10	Protected species	Bat species (C)	Natural England notes the clarification provided at point 5.22 of Table 5.1 (Natural England RR Response) in the Applicant's Responses to Relevant Representations and Additional Submissions document (AS-038) and consider this point to be resolved at this stage.	N/A	Green

11	Biodiversity net gain	Additional information required in order to demonstrate that a 10% biodiversity net gain will be achieved (C)	At this stage, our position remains as set out in our Relevant Representations Version 1.2 (AS-011)). However, we welcome continued discussions and progress in this area. It is noted and welcomed that an updated BNG report is to be submitted to the Examination which states that a 10% biodiversity net gain can be achieved for all habitat types identified on the site. Natural England will review this information when provided, to ensure it addresses the concerns raised in our Relevant Representations Version 1.2 (AS-011)). We highlight that Natural England's previous advice (as detailed in our Relevant Representations (AS-011)) should be considered when updating the BNG strategy.	Natural England note the clarification provided in Table 5.1– Natural England RR Response regarding the proposed approach to securing 10% Biodiversity Net Gain post-development. Natural England are in broad agreement with the principal of securing the overall biodiversity net gain requirements via a Section 106 Agreement; however, we highlight that regardless of the approach taken, all habitats accounted for in the metric and contributing toward the achievement of 10 % Biodiversity Net Gain (on-site and off-site) must be legally secured and maintained for the minimum 30 year period. We recommend clarity is provided regarding how all on and off-site biodiversity net gain is to be secured. We highlight that all off-site BNG units should be included in a Section 106 agreement, as already committed to for River Units in the REAC (AS-027).	Amber
12	Biodiversity net gain	River BNG units achieve no get gain in either of the scenarios currently presented	Natural England's position on River BNG units remains as set out in our Relevant Representations Version 1.2 (AS-011)) at this stage. However, we are currently in discussions with the Applicant regarding provision of River BNG units and welcome continued progress in this area.	Natural England's advice regarding the mechanism for securing relevant BNG measures coincides with the above advice (Natural England key issue reference 11).	Amber
14	Biodiversity net gain	The Habitat Provision Area within the order limits should be	Natural England notes the clarification provided in 5.26 of Table 5.1 (Natural England RR Response) in the Applicant's Responses to Relevant Representations	Natural England's advice regarding the mechanism for securing relevant BNG measures coincides with the above advice (Natural England key issue reference 11).	Amber

	ad ac an atra and A statistics and October 1. 1.	and a company (AC	
	ed as on-site and Additional Submission	· ·	
	Biodiversity 038) that the on-site Habit		
Net Ga			
	sment, and in the on-site habitat base		
	ore subject to Biodiversity Metric Calcula		
10% n	et gain the commentary and advice		
	Natural England in our Re		
(C)	Representations Version	1.2 (AS-011)).	
	It is welcomed that an upo	late to the metric	
	calculations submitted with		
	application has been carri		
	demonstrates that a 10%		
	gain can be achieved whe		
	habitat provision area is in		
	baseline or not.		
	bacomio or riot.		
	However, the currently pro	pposed approach	
	does not align with the dis	cretionary advice	
	provided by Natural Engla		
	behalf of Drax Power Limi		
	2022. As per Natural Engl		
	response to the Consultat		
	Net Gain Regulations and		
	document issued by the D		
	Environment, Food and R		
	(Defra), an approach of co		
	mitigation lands within the		
	boundary (or order limits)	·	
	not be supported.		
	We highlight that this advi		
	the Consultation outcome		
	response and summary of	•	
	document (updated 21 Fe		
	relating to Defra's Consult		
	Biodiversity Net Gain regu	llations and	

			implementation. Section 4.3 states that "We do not intend to make a distinction for NSIPs between on-site habitats (which are subject to BNG) and any dedicated environmental mitigation areas included in the project boundary. This maintains consistency with the approach for TCPA development. We will consult further on this proposal through the draft biodiversity gain statement." This also aligns with the Biodiversity Metric 3.1 User Guide (Natural England, 2022) which in respect to on-site land states in Paragraph 3.2 "On-site' includes all land within the boundary of a project. In a planning context, this usually means within a red line boundary."		
13	Biodiversity net gain	Clarity provided regarding impacts to habitats identified as habitats of principal importance (HPI) and proposed mitigation. (C)	Natural England welcomes the clarification and further justification provided in 5.25 of Table 5.1 (Natural England RR Response) in the Applicant's Responses to Relevant Representations and Additional Submissions document (AS-038) regarding the presence of priority habitat. Based on the information provided, we consider this point to be resolved at this stage.	N/A	Green
15	Soils and Best and Most Versatile Agricultural Land	The Agricultural Land Classification (ALC) Grade should be calculated for all agricultural (or land which was last used	Natural England welcomes the Applicant's commitment in 5.6 of the Applicant's Responses to Relevant Representations (AS-038) to undertake further ALC surveys and use this information to inform the	We welcome the measures specified in GC2 of the REAC (AS-027) to be included in the Soil Handling Management Plan (SHMP), as part of the CEMP. We are satisfied that these measures are secured via the DCO.	Green

		for agricultural use) land subject to proposed development or disturbance (C)	habitat and landscaping plan to be developed for the Habitat Provision Area. However, we highlight that these results do not appear to have been provided at Deadline 1. We advise that the information from the further ALC surveys should also feed into the Soil Management Plan, where appropriate. Natural England welcome the Applicant's clarification of the ALC Grade of the Fallow Field (Off-Site Habitat Provision Area).		
16	Soils and Best and Most Versatile Agricultural Land	Additional information provided regarding the Environmental Statement Chapter 11 Ground Conditions – EIA Methodology (C)	Natural England welcomes the Applicant's comparison of the ALC EIA methodologies in Table 5.1 of the Applicant's Responses to Relevant Representations (AS-038). The ICE (2019) EIA Handbook Magnitude assessment relates to the area of permanent and temporary loss, and does not include ALC grades. However, Natural England acknowledge that the effect of using either methodology remains not significant. Natural England also acknowledges that the IEMA guidance regarding soils was published in March 2022 after the assessment methodology for the Drax BECCS DCO had been established through the Scoping and PEIR.	We welcome the measures specified in GC2 of the REAC (AS-027) to be included in the Soil Handling Management Plan (SHMP), as part of the CEMP.	Green

			We welcome that the Applicant's commitment to undertake further ALC surveys and use this information to inform the habitat and landscaping plan to be developed for the Habitat Provision Area.		
17	Soils and Best and Most Versatile Agricultural Land	Additional information should be provided regarding sustainable soil management in the Soil Handling Management Plan.	Natural England notes that The REAC (document reference AS-028) has been updated to reflect the advice in our Relevant Representations (AS-011). We welcome the commitment that the Soil Management Handling Plan (included in the CEMP (as referred to in REAC item GC2)) will in part be informed by the habitat and landscape plan for the Habitat Provision Area, which will be developed at the detailed design stage. We advise that the information from these ALC surveys should also feed into the Soil Management Plan, where appropriate. Subject to the securing of the REAC via the DCO, Natural England now consider this matter agreed.	We welcome the measures specified in GC2 of the REAC (AS-027) to be included in the Soil Handling Management Plan (SHMP), as part of the CEMP.	Green

Natural England's Written Representations

Part III: Natural England's response to the Examining Authority's (ExA's) first written questions with a deadline of 22 February 2023

Table 2: N	Table 2: Natural England response to Examiner's initial questions					
ExA	Question	Question	Answer			
question	addressed					
ref	to					
GEN.1.4	Environment Agency (EA)/ Natural England (NE)/ North Yorkshire County Council (NYCC)/ Selby District Council (SDC)	Are you satisfied that the list of plans outlined in the REAC, to be included in the CEMP, is complete? Would you expect any further plans to be listed? Would you expect to see any outline plans at this stage?	Our answer is set out against the following sub-headings from our key areas of remit: Internationally and nationally designated sites Biodiversity net gain Soils and best and most versatile agricultural land Internationally and nationally designated sites As stated above (Table 2, Natural England key issue reference 19), Natural England recommends that monitoring of the relevant designated sites should be carried out for the identified pollutants (acid and nitrogen deposition, and ammonia). This requirement should be secured by the DCO or permit variation application (outlining proposed mitigation measures and a detailed monitoring plan). It is anticipated that the requirement for this monitoring may be included in the REAC as an Ecological Air Quality Monitoring Plan (or similar title) with the methodology to be agreed with Natural England. We also highlight that the requirement for additional plans in the REAC will depend on the outcomes of the outstanding further assessment of effects on some designated sites. With regards to mitigation measures for other impacts on internationally and nationally designated sites, Natural			

England agrees that the list of plans outlined in the REAC, to be included in the CEMP, is complete at this stage.

However, as detailed below in our answer to BIO.1.14, we highlight that the plans which are required to mitigate for potential impacts to designated sites during the operational phase do not appear to be currently secured, as reference to the REAC in the DCO is currently limited to the CEMP.

Natural England does not necessarily expect to see any outline plans at this stage; however, we highlight that the plans must detail relevant mitigation measures as specified in the HRA. Further detailed advice is included in our answer to BIO.1.14 below.

Biodiversity net gain (BNG)

Natural England welcomes reference to the Landscape and Biodiversity Strategy (LBS) in the REAC, which will be developed from the Outline LBS (APP-180).

However, we highlight that the BNG strategy is not included in the REAC, and only limited details of the BNG strategy are currently included in the OLBS. We recognise that the Applicant has stated that it will not be the LBS by itself which supports achievement of the full BNG figure as this will be secured_via a Section 106 Agreement. However, as detailed in Table 1 above (Natural England reference 11), we highlight that regardless of the approach taken, all habitats accounted for in the metric and contributing toward the achievement of 10 % Biodiversity Net Gain (on-site and off-site) must be legally secured and maintained for the minimum 30-year period. Clarity on the proposed approach should therefore be provided.

Soils and best and most versatile agricultural land

			Natural England is satisfied that the REAC will include a Soil Management Handling Plan, which will include mitigation measures based on the soils present within the Site. The mitigation within the REAC will be secured by requirements in the DCO including the requirement for a Soil Management Handling Plan to be produced as part of the CEMP for the Proposed Scheme.
BIO.1.9	NE	Can NE provide its view of the Applicant's conclusion that although the modelled CLo would be exceeded for acid deposition at a number of designated sites it would in reality be analogous to 1%, as the modelling was based on a number of conservative assumptions.	Modelling by definition is uncertain. Outcomes from any model are not expected to directly replicate the exact concentration received at a protected site as a result of a proposed development. Any model is of course dependent on its inputs including (in the case of air quality (AQ) models) assumptions on meteorology, emissions, plant operational capacity, deposition velocities on a particular habitat type etc. There is no way a model can precisely predict these – albeit they are based on our best available scientific understanding, and it is accepted that robust AQ models are "the best we have" to predict AQ impacts. In order to ensure this uncertainty complies with the precautionary principle, it is essential that conservative assumptions are built into the model, to achieve a "realistic worst case". Therefore, if the outcome of the (precautionary) model predicts a process contribution as <1% of the relevant environmental benchmark we have sufficient and reasonable certainty that it will indeed be <1% in real life, which is the threshold at which we would conclude no likely significant effect. It is acknowledged that this precautionary approach may overestimate pollutant deposition or concentration in many cases. However, this possible/ likely overestimation cannot be discounted, where the assumptions included in the model cannot be constrained, due to uncertainty. Therefore, in this case, a process contribution of, say, 2%, cannot be concluded

			to be analogous to 1% on the grounds that certain assumptions will overestimate concentrations.
BIO.1.11	Applicant/NE	Para 8.10.39 states that in relation to potential effects on GCN an application to use the DLL scheme, that provides strategic mitigation, has been made to NE. i. Can the Applicant provide an update on progress with the application. ii. Please can NE indicate if it is likely to be able to submit a LONI to the Examination.	i) Natural England's District Level Licensing Team have been in discussions with the Applicant over the pre-examination and Examination Periods to date. This has allowed the Applicant and Natural England to reach agreement regarding the requirements for the Applicant to rely on the North-East Yorkshire DLL Scheme. Natural England provided an updated Impact Assessment and Conservation Payment Certificate (IACPC) to the Applicant on the 19 December 2022. This confirms that subject to the Applicant making the required Conservation Payments and Natural England's final sign-off, the Applicant can rely on the North-East Yorkshire DLL. Following final discussions between the Applicant and Natural England, the Applicant returned a signed copy of the IACPC to Natural England on the 30 January 2023. Natural England are currently awaiting a First Stage Payment (FSP) to be made by the Applicant before the counter-signed IACPC can be issued. ii) As set out in the Planning Inspectorate's Advice Note Eleven, Annex C – Natural England and the Planning Inspectorate, where strategic approaches such as district level licensing (DLL) for great crested newts (GCN) are used, a letter of no impediment (LONI) will not be required. Instead, the developer will need to provide evidence to the Examining Authority (ExA) on how and where this approach has been used in relation to the proposal, which must include a countersigned Impact Assessment and Conservation Payment Certificate (IACPC) from Natural England, or a similar approval from an alternative DLL provider. As outlined above, Natural England are currently awaiting a First Stage Payment (FSP) to be made by the Applicant before the counter-signed IACPC can be issued.

BIO.1.12	EA/NE	The ExA notes the content of Air Quality Technical Note 1, submitted in October 2022, that updates the emissions modelling results in relation to amines and other pollutants, and the Applicant's conclusion that the revised data does not change the conclusions of the air quality assessment and the HRA. Can NE and the EA provide their view of the effect of the revised data on those assessments.	The applicant has concluded that "the revised amines modelling has no material impact on ecological receptors due to the low contribution from amines to nutrient nitrogen (N) deposition and acid deposition and hence no change to the conclusions of the HRA". Natural England has no in-house modelling expertise so cannot comment on the detail of the revised modelling. Assuming the Environment Agency has no major concerns with the specifics of the modelling, we accept that the revised impacts at the relevant protected sites (in terms of Nitrogen deposition and acid deposition) are as previously presented and our comments would remain the same. We note that the applicant considers amine impact only in terms of deposition and not concentration for ecological receptors. However, there is potential for amines to react in the atmosphere in a similar way to ammonia, which is a pollutant in its own right, and not just as a component of deposition. Recent reviews of current scientific understanding undertaken by the Environment Agency and the UKs Air Quality Technical Advisory Group (AQTAG) have suggested that the impact of atmospheric breakdown products from emitted amines may need to be considered in addition to deposition.
BIO.1.14	NE/Relevant Planning Authority (RPAs)	Are you satisfied that mitigation measures outlined in Section 12.10 of ES Chapter 12 and the proposed Surface Water Management Plan referred to in WE8 of the REAC are secured in Schedule 2 of the dDCO?	Natural England are satisfied that the mitigation measures included in WE8 of the REAC are appropriate to conclude no adverse effect on integrity of the relevant internationally designated sites from water quality impacts, as long as they are included in the Surface Water Management Plan and rigorously implemented throughout construction, operation and decommissioning phases.
		35	

We would welcome clarification regarding whether additional measures outlined in WE8, WE9, and WE12, WE13 of the REAC relating to PC-02 are considered to be mitigation for potential impacts on the Humber Estuary designated sites, and highlight that relevant updates should be made to the HRA where appropriate.

We also note that there is no explicit reference to the Surface Water Management Plan in the dDCO. Although Schedule 2 Requirement 14 includes commitment to completing a CEMP in line with relevant plans in the REAC, including the Surface Water Management Plan, the CEMP by definition is limited to construction phase measures, whereas the Surface Water Management Plan and associated measures must also apply to the operation phase. Therefore, we consider that it may be beneficial to include an explicit reference to the Surface Water Management Plan in the DCO.

We also highlight our concerns with the use of the phrase 'substantially in accordance with' in this context, i.e., "The plan submitted and approved pursuant to sub-paragraph (1) must be substantially in accordance with the register of environmental actions and commitments," and note that the term 'substantially' is not defined in the dDCO. The inclusion of mitigation measures in the HRA should be supported by evidence and confidence that they will be effective and that they can be legally enforced to ensure they are strictly implemented. We consider that the term 'substantially' is open to interpretation and therefore there is potential uncertainty around whether this could lead to changes that mean the measures committed to in the HRA are not strictly implemented, and therefore the conclusions of the HRA could be undermined.

			Clarification on the definition of 'substantially' and its proposed application in the context of mitigation measures relied upon in the conclusions of the HRA would therefore be welcomed.
BIO.1.15	NE/RPAs	Are you satisfied that mitigation measures outlined in Section 5.1.3 of ES Appendix 6.2 and AQ1 of the REAC are secured in the dDCO?	Natural England are satisfied that the mitigation measures included in AQ1 are appropriate to conclude no adverse effect on integrity of the relevant internationally designated sites from air quality impacts during construction, as long as they are included in the CEMP and rigorously implemented throughout the construction phase. However, we highlight concerns with the use of the phrase 'substantially in accordance with' in this context. Our comments regarding this are detailed in our response to BIO.1.14 above.
BIO.1.16	NE	With reference to Tables 5-1 and 6-1 of the PCAR [AS-045], is NE satisfied that Appendix 4 of the PCAR (Ecology Survey Technical Note) [AS-053] provides sufficient evidence for the Applicant's conclusion that there is negligible potential for land within and adjacent to the sites of the proposed changes to act as functionally-linked land for any of the qualifying interests of the relevant European sites?	On the basis of information provided in 6-1 of the PCAR (AS-045), Natural England advises that there is currently not enough information to rule out the likelihood of significant effects from loss of/disturbance to functionally linked land associated with the Humber Estuary SPA/Ramsar in the Order Limits for Proposed Change 02 (PC-02). We therefore recommend that further assessment of the potential suitability of the proposed Order Limits and adjacent areas for SPA birds is carried out to inform the updated HRA. Further detailed advice on the assessment is provided in our Relevant Representation for PC-02 (submitted online, dated 09 February 2023) and detailed above (Table 2, Natural England key issue reference 27). Natural England agrees with the assessment provided for the areas associated with PC-01 in Table 5-1 of the PCAR (AS-045) and agrees that likely effects from loss of/disturbance to functionally linked land associated with the Lower Derwent

			Valley SPA/Ramsar and Humber Estuary SPA/Ramsar can be ruled out for PC-01, based on the information provided.
BIO.1.17	NE	Is NE satisfied that Appendix 4 of the PCAR (Ecology Survey Technical Note) [AS-053] provides sufficient information on species that may be present or use the land required for the change proposals, and that no further mitigation is required?	Natural England are broadly satisfied with the information provided in the Ecology Survey Technical Note (AS-053). However, we are aware that additional protected species surveys have been carried out since completion of this note and we are yet to receive these reports. Therefore, we cannot rule out the requirement for further mitigation at this stage.
			Natural England also highlight that E13 of the REAC includes a commitment to completion of a pre-construction walkover, which will inform the detailed delivery of construction phase ecological mitigation for the relevant protected species. We also note that the monitoring surveys included in E14 of the REAC should be suitably secured.
BIO.1.19	NE	Please can NE confirm whether it agrees that the HRAR for the Proposed Development considers the correct European sites and features.	Natural England agrees that the correct list of European sites and features is considered in the HRA.
			We anticipate that further updates to the assessments in the HRA are to be completed, and we will provide comments on these in due course.
BIO.1.22	NE	In point 5.15 of the Applicant's Response to Relevant Representations and Additional Submissions [AS-038], the Applicant responds to NE's concerns about potential impacts from construction traffic emissions to air on the Humber Estuary SAC/ SPA/ Ramsar site designated features, which were ruled out in the HRAR. Similarly, NE raised concerns about such impacts on the Humber Estuary SSSI. Please can NE comment on whether the	Further information was provided by the Applicant in Table 5.1 (Natural England RR Response) of the Applicant's Responses to Relevant Representations (AS-038) to address concerns relating to potential impacts from construction traffic emissions to air on the Humber Estuary SAC/ SPA/ Ramsar site and SSSI. As detailed above (Table 1, Natural England key issue
		additional information provided sufficiently addresses its concerns about this matter.	reference 1 and 7), based on the information provided, Natural England agrees with the conclusion that likely significant effect on the Humber Estuary designated sites arising from

			construction traffic can be excluded. We advise that the assessment provided should be included in the revised HRA.
BIO.1.30	NE	The ExA notes that Section 3 of the HRAR concludes that there could be an LSE on the Lower Derwent Valley SPA/ Ramsar and the Humber Estuary SPA/ Ramsar in relation to loss of FLL in the Off-site Habitat Provision Area (in addition to the Habitat Provision Area) but that the information to inform appropriate assessment contained in Section 4.2 does not include an assessment in respect of that area. The ExA welcomes the commitment in point 5.14 of AS-038 that an updated HRAR will be provided that contains the additional information provided therein. Similarly, NE raised concerns about such impacts on a number of SSSIs. Please can NE comment on whether the additional information provided sufficiently addresses its concerns about this matter.	Natural England welcomes the additional information provided by the Applicant in 5.14 of Table 5.1 of the Applicant's Responses to Relevant Representations (AS-038) regarding potential loss of functionally land associated with the Lower Derwent Valley SPA/ Ramsar and the Humber Estuary SPA/ Ramsar (and underpinning SSSIs) in the Off-site Habitat Provision Area. Based on the further information provided, we agree that likely significant effect on the relevant designated sites can be ruled out for potential loss of functionally linked land in the Off-site Habitat Provision Area. We also welcome the commitment to include this further assessment in the revised HRA. Therefore, we consider that our previous concerns on this matter have been sufficiently addressed, subject to agreed updates in the HRA.
FRW.1.9	NE	Is NE satisfied that the evidence provided with the PCAR [AS-045] of the effects of the proposed changes on the water environment justifies the Applicant's conclusion that there would be no significant effects on water quality, and therefore on the features of the European sites, during construction and operation?	Natural England note that Table 5-1 of the PCAR (AS-045) states that the approach to PC-01 builds on the assessment within Chapter 12 Water Environment (APP-048) and Natural England agrees that the conclusions apply to PC-01. Therefore, adverse effect on integrity of the relevant internationally designated sites can be ruled out, subject to the mitigation measures in the REAC being included in the Surface Water Management Plan and rigorously implemented throughout construction, operation and decommissioning phases. With regards to PC-02, we note that Table 6-1 of the PCAR (AS-045) refers to additional potential impacts and new measures to prevent adverse impacts on the water environment. We would welcome clarification regarding whether these additional measures, now included in the Water Environment section of the REAC, are considered to be mitigation for potential impacts on the Humber Estuary

			designated sites from PC-02, and highlight that, if so, relevant updates should be made to the HRA, where appropriate.
GCC.1.1	NE	The ExA notes that land to the north of the East Construction Laydown Area within the Habitat Provision Area has not been subject to an ALC survey. The Applicant, in the ES Chapter 11 [APP-047], classes this land as Subgrade 3b based on a pre-1988 ALC survey which was based on anecdotal evidence of the landowner. NE is asked if it is satisfied with the classification of land that the Applicant is suggesting?	The Agricultural Land Classification (ALC) survey data presented in the Soil Resource and Agricultural Land Classification Survey (Appendix 11.2) does not provide complete coverage of the agricultural land within the project boundary (Figure 11.2). The applicant states that the extrapolation of the ALC grade utilising the adjacent surveyed land (as stated in para 11.7.28 of Chapter 11 (Ground Conditions) of the ES (APP-047)) suggests this section of the Habitat Provision Area is of Subgrade 3b (non BMV).
			Pre-1988 ALC site survey data is now out of date as it was assessed using criteria which have now been superseded. A detailed ALC survey should be undertaken in line with the 1988 MAFF Guidelines in the land north of the East Construction Laydown Area within the Habitat Provision Area to understand the ALC grade of the Habitat Provision Area, and whether this land, or part thereof, is Best and Most Versatile (BMV) or not.
			This is important given the proposal to remove topsoil or invert the topsoil at the Habitat Provision Area (Paragraphs 3.3.16 and 3.3.34; Outline Landscape and Biodiversity Strategy (6.6.1)). This would be soil loss or disturbance and potential BMV loss which is not considered in the EIA (Chapter 11).
			In the Applicant's Response to Relevant Representations and Additional Submissions, the Applicant states their intention to complete additional ALC surveys of the on-site Habitat Provision Area in 2023 (land to the north of the East Construction Laydown Area within the Habitat Provision Area),

			as set out in row 5.6 of Table 5.1 (document reference AS-038 Applicant's Responses to Relevant Representations). In summary, the current ALC Grading of the Habitat Provision Area has not been determined in a robust and reliable manner at this stage. However, it is understood by Natural England that the applicant will undertake a detailed ALC survey at the Habitat Provision Area which will provide reliable ALC Grade(s) of the area.
GCC.1.7	NE	In point 5.7 of the Applicant's Response to Relevant Representations and Additional Submissions [AS-038], the Applicant responds to NE's concerns about the methodology used to assess impact to agricultural land within Chapter 11 (Ground Conditions) of the ES [APP-047] relative to the methodology outlined within the ICE (2019) EIA Handbook. Please can NE comment on whether the comparison provided sufficiently addresses its concerns about this matter.	Natural England received a comparison of the ALC EIA methodologies by the Applicant's, as set out in row 5.7 of Table 5.1 of the Applicants Response to Relevant Representations (document reference AS-038). As detailed above (Table 1, Natural England key issue reference 16), Natural England acknowledge that the overall effect derived from using either methodology is not significant.

PART IV: Natural England's detailed comments on the draft Development Consent Order (DCO) and associated documents

3.1. Table 3 details Natural England's comments on the application document 3.1 Draft Development Consent Order (dDCO) (AS-076).

Natural England's Relevant Representations, Part IV, Table 3

Page	DCO reference	Natural England's comments	Risk (Red/Amber/Green)
38	Schedule 2 - Requirement 7	Natural England notes that the Applicant proposes to secure 10% biodiversity net gain via a Section 106 Agreement, rather than via a Requirement. We recommend clarity is provided regarding how all on and off-site biodiversity net gain is to be secured. As detailed in Table 1 above (Natural England reference 11), we highlight that regardless of the approach taken, all habitats accounted for in the metric and contributing toward the achievement of 10% Biodiversity Net Gain (on-site and off-site) should be legally secured, maintained and monitored for the minimum 30-year period.	Amber
38	Schedule 2 - Requirement 8	1 3 1 1	Amber
40	Schedule 2 - Requirement 14	Natural England welcomes Requirement 14 and highlights that the construction environmental management plan (CEMP) is essential to the robustness of the Habitats Regulations Assessment. However, as detailed above in our response to BIO.1.14 in Table 2 (above), we highlight that consideration should be given to the phrase 'substantially in accordance with' in this context. We also note that the requirement for additional mitigation measures will depend on the outcome of the assessment of potential impacts on internationally and nationally designated sites (Table 1 above).	Amber

		Natural England do not require to be consulted on the soil management matters in the CEMP, subject to soil handling being carried out in accordance with the measures specified in GC2 of the Register of Environmental Actions and Commitments (REAC) (AS-027).	
41	Schedule 2 - Requirement 15 and 19	Natural England welcomes Requirement 15 and 19 and highlights that they are essential to the robustness of the Habitats Regulations Assessment. We note that additional assessment of potential impacts on internationally and nationally designated sites from construction traffic emissions to air has been carried out and concluded that additional mitigation is not required (Natural England key issue reference 1 and 7 in Table 1 above).	Green
42	Schedule 2 - Requirement 18	Natural England welcomes that the revised draft DCO Schedule 2 Requirement 18 specifies that "measures set out in the [Decommissioning Environmental Management] plan submitted under paragraph (1) must be consistent with the principles informing the measures that are set out in the register of environmental actions and commitments."	Green
NA	NA	Natural England notes that the monitoring, recording and reporting to the regulator (Environment Agency) is considered appropriate to ensure emissions from the plant itself remain within the assumed emissions used in the assessments. Therefore, our previous comment on securing currently proposed mitigation measures to reduce air quality impacts in the DCO is considered to be resolved.	Amber
		However, we also recommend that monitoring of the protected sites should also be carried out for the identified pollutants (acid and nitrogen deposition, and ammonia). This requirement should be secured by the DCO or permit variation application (outlining proposed mitigation measures and a detailed monitoring plan).	
		Natural England advises that the requirement for additional mitigation measures and approach to securing such measures will depend on the outcome of upcoming assessments.	