ENVIRONMENTAL STATEMENT – VOLUME 3 – APPENDIX 1.2

EIA Scoping Opinion

Drax Bioenergy with Carbon Capture and Storage

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

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The Planning Inspectorate
Yr Arolygiaeth Gynllunio

SCOPING OPINION:

Proposed Drax Bioenergy with Carbon Capture and Storage Project

Case Reference: EN010120

Adopted by the Planning Inspectorate (on behalf of the Secretary of State) pursuant to Regulation 10 of The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

February 2021

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1. INTRODUCTION

1.1 Background

1.1.1 On 18 January 2021, the Planning Inspectorate (the Inspectorate) on behalf of the Secretary of State (SoS) received a scoping request from Drax Power Limited (the Applicant) under Regulation 10 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) for the proposed Drax Bioenergy with Carbon Capture and Storage Project (the Proposed Development).

1.1.2 In accordance with Regulation 10 of the EIA Regulations, an Applicant may ask the SoS to state in writing its opinion *'as to the scope, and level of detail, of the information to be provided in the environmental statement'.*

1.1.3 This document is the Scoping Opinion (the Opinion) provided by the Inspectorate on behalf of the SoS in respect of the Proposed Development. It is made on the basis of the information provided in the Applicant's report entitled 'Environmental Impact Assessment Scoping Report Drax Bioenergy with Carbon Capture and Storage' (the Scoping Report). This Opinion can only reflect the proposals as currently described by the Applicant. The Scoping Opinion should be read in conjunction with the Applicant's Scoping Report.

1.1.4 The Applicant has notified the SoS under Regulation 8(1)(b) of the EIA Regulations that they propose to provide an Environmental Statement (ES) in respect of the Proposed Development. Therefore, in accordance with Regulation 6(2)(a) of the EIA Regulations, the Proposed Development is EIA development.

1.1.5 Regulation 10(9) of the EIA Regulations requires that before adopting a scoping opinion the Inspectorate must take into account:

(a) any information provided about the proposed development;

(b) the specific characteristics of the development;

(c) the likely significant effects of the development on the environment; and

(d) in the case of a subsequent application, the environmental statement submitted with the original application.

1.1.6 This Opinion has taken into account the requirements of the EIA Regulations as well as current best practice towards preparation of an ES.

1.1.7 The Inspectorate has consulted on the Applicant's Scoping Report and the responses received from the consultation bodies have been taken into account in adopting this Opinion (see Appendix 2).

1.1.8 The points addressed by the Applicant in the Scoping Report have been carefully considered and use has been made of professional judgement and experience in order to adopt this Opinion. It should be noted that when it comes to consider the ES, the Inspectorate will take account of relevant legislation and guidelines. The Inspectorate will not be precluded from requiring additional information if it

is considered necessary in connection with the ES submitted with the application for a Development Consent Order (DCO).

1.1.9 This Opinion should not be construed as implying that the Inspectorate agrees with the information or comments provided by the Applicant in their request for an opinion from the Inspectorate. In particular, comments from the Inspectorate in this Opinion are without prejudice to any later decisions taken (eg on submission of the application) that any development identified by the Applicant is necessarily to be treated as part of a Nationally Significant Infrastructure Project (NSIP) or Associated Development or development that does not require development consent.

1.1.10 Regulation 10(3) of the EIA Regulations states that a request for a scoping opinion must include:

(a) a plan sufficient to identify the land;

(b) a description of the proposed development, including its location and technical capacity;

(c) an explanation of the likely significant effects of the development on the environment; and

(d) such other information or representations as the person making the request may wish to provide or make.

1.1.11 The Inspectorate considers that this has been provided in the Applicant's Scoping Report. The Inspectorate is satisfied that the Scoping Report encompasses the relevant aspects identified in the EIA Regulations.

1.1.12 In accordance with Regulation 14(3)(a), where a scoping opinion has been issued in accordance with Regulation 10 an ES accompanying an application for an order granting development consent should be based on *'the most recent scoping opinion adopted (so far as the proposed development remains materially the same as the proposed development which was subject to that opinion)'*.

1.1.13 The Inspectorate notes the potential need to carry out an assessment under The Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations), as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. This assessment must be coordinated with the EIA in accordance with Regulation 26 of the EIA Regulations.

1.2 The Planning Inspectorate's Consultation

1.2.1 In accordance with Regulation 10(6) of the EIA Regulations the Inspectorate has consulted the consultation bodies before adopting a scoping opinion. A list of the consultation bodies formally consulted by the Inspectorate is provided at Appendix 1. The consultation bodies have been notified under Regulation 11(1)(a) of the duty imposed on them by Regulation 11(3) of the EIA Regulations to make information available to the Applicant relevant to the preparation of the ES. The Applicant should note that whilst the list can inform their consultation, it should not be relied upon for that purpose.

1.2.2 The list of respondents who replied within the statutory timeframe and whose comments have been taken into account in the preparation of this Opinion is provided, along with copies of their comments, at Appendix 2, to which the Applicant should refer in preparing their ES.

1.2.3 The ES submitted by the Applicant should demonstrate consideration of the points raised by the consultation bodies. It is recommended that a table is provided in the ES summarising the scoping responses from the consultation bodies and how they are, or are not, addressed in the ES.

1.2.4 Any consultation responses received after the statutory deadline for receipt of comments will not be taken into account within this Opinion. Late responses will be forwarded to the Applicant and will be made available on the Inspectorate's website. The Applicant should also give due consideration to those comments in preparing their ES.

2. THE PROPOSED DEVELOPMENT

2.1 Introduction

2.1.1 The following is a summary of the information on the Proposed Development and its site and surroundings prepared by the Applicant and included in their Scoping Report. The information has not been verified and it has been assumed that the information provided reflects the existing knowledge of the Proposed Development and the potential receptors/resources.

2.2 Description of the Proposed Development

2.2.1 The Applicant's description of the Proposed Development, its location and technical capacity (where relevant) is provided in Chapter 2 of the Scoping Report.

2.2.2 The Proposed Development is for the installation of post-combustion carbon capture technology at up to two of the existing 600 Megawatt electrical (MWe) biomass generating units (Unit 1 and 2) at Drax Power Station located in Selby, North Yorkshire, shown on a site boundary plan contained in Scoping Report Figure 1.1. The precise location of each element of the Proposed Development within the application site is yet to be defined; a layout plan contained within Scoping Report Figure 1.2 identifies the areas within the application site where the main elements would be located.

2.2.3 The Proposed Development is comprised of the following main elements:

Works at Drax Power Station

- Carbon capture infrastructure at Drax Power Station, including compression and treatment of carbon dioxide (CO_2) to allow connection to a National Grid CO_2 transport system (see Figure 2.2, Scoping Report). Core items of the existing infrastructure would be re-used by installing and integrating the carbon capture technology with the current power generating units, cooling water systems, and main stack. It is anticipated that captured CO_2 would be transported via a proposed National Grid Ventures pipeline for compression at a site at Easington and storage in naturally occurring aquifers under the southern North Sea. The pipeline and the storage infrastructure will be the subject of separate DCO applications and do not form part of the Proposed Development.
- infrastructure to supply process steam. Two design options are described in the Scoping Report:
  - Steam Option A: steam to be supplied from the existing Drax Power station boiler/steam turbine, which would require additional infrastructure to connect the carbon capture technology to the existing steam supply;
  - Steam Option B: modification of an existing Drax Power Station boiler/turbine to provide a combined heat and power biomass unit to provide a steam source for the carbon capture technology;

- a cooling solution. Two design options are proposed:
  - Cooling Option A: utilise existing cooling towers at Drax Power Station which use river water abstracted from the River Ouse;
  - Cooling Option B: installation of new cooling towers to the north of Drax Power Station. This option would only be chosen if a flow of 100 MW through the North cooling tower system became unfeasible.
- Additional chemical storage and distribution handling facilities required to process amine solvent required for the carbon capture technology. It is anticipated that these would include new cylindrical storage tanks and warehousing for materials including amine solvent, caustic soda, anti-foam, sulphuric acid, amine solvent waste and some hazardous waste.
- Infrastructure to compress, dry and remove contaminants from the carbon dioxide exiting the carbon capture plant before entering the transport system. New pipework would be required to connect to the compression locations. Multiple design options are currently under consideration.

Environmental Mitigation Area

- Land within the Proposed Development site boundary to the north of Drax Power Station potentially to be used for environmental mitigation purposes. The Scoping Report states that no new infrastructure is proposed on this land.

Upgraded Drax Jetty and Road Modifications

- The Applicant is considering two alternative options for the transport of Abnormal Indivisible Loads (AILs) and construction materials to the application site:
  - Option 1: Construction of an upgraded facility at the existing Drax Jetty approximately 2.5km to the east of Drax Power Station to transport AILs (and possibly construction materials) to the site via the River Ouse. The upgraded facility would include security lighting, fencing, storage, welfare facilities and laydown areas. Capital and maintenance dredging of the River Ouse could be required. Transport of AILs from the upgraded jetty to the Power Station may require modifications to some roads (Redhouse Lane, Carr Lane and New Road) between the two locations and could require temporary use of agricultural land adjacent to the roads to facilitate road modifications.
  - Option 2: AILs and construction materials delivered to the Port of Goole and transported to site via the Goole Bypass, M62 and A645. This would require the temporary removal of street furniture and overnight road closures.

Construction Laydown Area

- Construction of one or more temporary construction compounds to the east of Drax Power Station within the Proposed Development site boundary. These would include offices, warehouses, workshops, open air storage areas and car parking. The Scoping Report states that these would be reinstated to their original use following completion of the construction works.

Other Works

- Other works, including demolition/removal of temporary buildings, security infrastructure, lighting including columns, drainage, landscaping and ecological mitigation and refurbishment or demolition/reconstruction of existing electrostatic precipitators.

2.2.4 The Scoping Report states that construction of the Proposed Development will commence in 2024 and be phased over a 39-month period (see Table 2.1, Scoping Report). Unit 2 is anticipated to be operational in 2027 and Unit 1 in 2028. The estimated operational lifetime of the Proposed Development is 25 years. The Scoping Report does not provide a description of the decommissioning phase.

2.2.5 The Proposed Development site encompasses the existing Drax Power Station and is located 5km south east of Selby and 7.5km north west of Goole. The north eastern boundary of the site coincides with the River Ouse and the existing Drax Jetty. This location is approximately 3.5km upstream from the Humber Estuary Special Area of Conservation (SAC), Special Protection Area (SPA), Ramsar site and Site of Special Scientific Interest (SSSI). The River Derwent SAC and SSSI is located approximately 700m north of the Proposed Development. In total, the Scoping Report identifies ten international and eight nationally/locally designated nature conservation sites within 15km of the Proposed Development site boundary (see Table 9.2, Scoping Report). Drax Augustinian Priory Scheduled Monument (SM) is located within the Proposed Development site boundary (see Figure 2.1, Scoping Report). The Carr Dyke surface water body bisects the Proposed Development site which is in Flood Zone 3 and situated above a Principal Aquifer and Groundwater Source Protection Zone (SPZ) (see Figure 2.1, Scoping Report). Both the Carr Dyke and the River Ouse are Water Framework Directive (WFD) waterbodies.

2.2.6 The Proposed Development site is comprised of the existing Drax Power Station, Drax Jetty, and the local road network and fields, including agricultural land holdings owned by Drax Abbey Farm. In addition, New Road Hill historic landfill site is located within the Proposed Development boundary (see Figure 2.1, Scoping Report). There are multiple land uses within or in proximity to the Proposed Development including housing, Public Rights of Way (PRoW), development land and existing businesses.

2.3 The Planning Inspectorate's Comments

Description of the Proposed Development

2.3.1 The Inspectorate notes that the precise location and design of some elements of the Proposed Development have not been determined and will be refined prior to submission of the DCO application. Notably, limited information on the location, design and extent of the 'Other Works' has been provided in the Scoping Report. These other works include potential refurbishment, demolition, and reconstruction of existing electrostatic precipitators, to which no other reference is made in the report.

2.3.2 The lack of detailed information provided in the Scoping Report has constrained the ability of the Inspectorate, and potentially consultation bodies, to provide meaningful comments on its content and in some cases has prevented the Inspectorate from being able to agree to scope matters out of the assessment at this time.

2.3.3 The maximum parameters for each element of the Proposed Development have not been defined. The ES must include a clear description of the location, design and maximum parameters for each element of the Proposed Development. It is considered that figures may be useful in this regard.

2.3.4 The Scoping Report does not provide a description of the decommissioning phase of the Proposed Development. Paragraph 2.5.1 of the Scoping Report states, '*at the end of the operation, the facility may have some residual life remaining and an investment decision may be made as to whether the operating life will be extended*'. The Inspectorate considers that an assessment of the decommissioning phase should be provided in the ES. This should be proportionate and include a description of the decommissioning works and estimated timescales of completion. The Applicant should clearly demonstrate that the anticipated complete lifecycle of the Proposed Development, including the decommissioning phase, has been described and adequately assessed in the ES. In addition, the Applicant should ensure that the operational lifetime of the Proposed Development specified in the ES is consistent with that set out in the DCO.

2.3.5 The Scoping Report does not provide an indication of the construction methods, machinery (numbers and type) or resources (quantities and type) that would be required to facilitate construction of the Proposed Development. The ES should clearly describe these and provide an assessment of resulting impacts, including from the use, transport, movement and storage of materials, where significant effects are likely to occur.

2.3.6 The MWe value for each of the two existing biomass generating units is inconsistently described in the Scoping Report. For example, paragraph 2.2.4 states it is 600 MWe whilst paragraph 8.6.1 states it is 660 MWe. The Applicant should ensure that a consistent description of the development is provided in the ES.

2.3.7 The Scoping Report does not describe the activities required for the potential road modifications to Redhouse Lane, Carr Lane and New Road in the event that the upgrading of Drax Jetty is taken forward. The ES should include a description of the works required, including identification of the specific location of these works and any temporary or permanent use of agricultural land required to facilitate construction. It is considered that figures would be useful in this regard.

2.3.8 The Scoping Report does not provide any information on the works or activities that may be undertaken on the land identified as the Environmental Mitigation Area. The ES should include a description of proposed works within the Environmental Mitigation Area and identify how these relate to the Proposed Development, including relevant design and/or environmental objectives, for

example, biodiversity net gain, as mentioned in paragraph 3.11.4 of the Scoping Report. The Applicant's attention is drawn to the Environment Agency's (EA's) consultation response in this regard.

2.3.9 Paragraph 2.3.1 of the Scoping Report refers to 'Unit 1' and 'Unit 2' in relation to the Proposed Development. It is understood that Unit 1 and 2 relate to two existing biomass generating units. The ES should identify their location on a plan and distinguish between the two units.

2.3.10 Scoping Report paragraph 2.2.10 states that for Steam Option A, infrastructure would be needed to connect the carbon capture technology to the existing steam supply. It is inferred that such infrastructure would also be required in the event that Steam Option B was taken forward, but this is not clearly stated. This should be made clear in the description of the development in the ES and potential impacts considered accordingly.

2.3.11 Paragraph 2.2.17 states that there may be a requirement for 'unplanned venting of carbon dioxide for safety reasons prior to the gas entering the National Grid transport system'. No further information is provided on what this would involve, and no other references are made to it in the Scoping Report. This should be included in the description of the Proposed Development provided in the ES. A worst-case scenario should be assumed for the purposes of assessment and any potential impacts arising from this activity should be considered in the technical assessments as appropriate.

2.3.12 The Inspectorate notes that the Scoping Report provides a generic diagram of the carbon capture infrastructure (see Figure 2.2, Scoping Report). The ES should include a detailed process diagram that clearly identifies the components of the proposed carbon capture technology and is consistent with the description of the Proposed Development provided in the ES. This must be consistent with the description of development in the DCO.

2.3.13 Paragraph 2.3.2 of the Scoping Report states that construction laydown areas will be reinstated to their original use following construction of the Proposed Development. The Scoping Report does not provide a description of the reinstatement works to be undertaken or the current land-use within these areas. The ES should include a description of these works and provide an assessment of potential impacts where significant effects could occur.

2.3.14 The Inspectorate notes that two options are currently under consideration for the transport of AILs and construction material to the application site (see Section 2.2 of this Scoping Opinion). The location of the roads under Option 1 is indicated in Figure 1.2 of the Scoping Report, however there is no figure showing the roads that would be affected under Option 2, as described in Chapter 2 of the Scoping Report. In the event that Option 2 is taken forward the ES should provide a description of the road network that would be affected under Option 2 and identify the location of temporary road closures and removal of barriers and street furniture. It is considered that a figure may be useful in this regard.

2.3.15 The two options (Option 1 and Option 2) under consideration for transport of AILs to site are inconsistently referenced in the Scoping Report. For example,

paragraph 2.2.21 states that Option 1 consists of upgrades to the existing Drax Jetty and Option 2 consists of delivery via the existing road network. However, paragraph 6.8.2 states this in reverse. (For the purposes of this Scoping Opinion the ordering set out in Chapter 2 of the Scoping Report has been used going forward).

2.3.16 The descriptions of Options 1 and 2 also differ between Chapters 2 and 6 of the Scoping Report. Chapter 6 states, in respect of Option 1, that in addition to highway improvements, permanent or temporary use of agricultural land adjacent to the road, the temporary removal of street furniture, lifting or temporary removal of overhead lines and overnight road closures may be required. These are not included in the description contained in Chapter 2, and reference is made only to temporary use of adjacent agricultural land. In relation to Option 2 it is stated that the lifting or temporary removal of overhead lines would be required in addition to requiring the temporary removal of street furniture and overnight road closures, however this is not included in the description of Option 1 contained in Chapter 2. The Applicant should ensure that references to and the description of the Proposed Development are consistent throughout the ES and that potential impacts that could give rise to significant effects are assessed for each element of the Proposed Development.

2.3.17 The Scoping Report states that temporary construction lighting and additional operational lighting may be required. In addition, the Scoping Report states additional operational lighting will comply with the same standards as existing lighting at Drax Power Station. The ES should clearly describe the location and design of temporary construction lighting and additional operational lighting and provide an assessment where significant effects are likely to occur. The design standards that additional lighting will be required to meet should also be described in the ES, including evidence they are fit for purpose.

2.3.18 The Scoping Report does not provide an estimated number of staff required to facilitate construction and operation of the Proposed Development. The ES should describe the anticipated number of staff required during construction and operation of the Proposed Development and ensure that this is appropriately considered within the relevant aspect chapters of the ES.

Alternatives

2.3.19 The EIA Regulations require that the Applicant provide 'A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects'.

2.3.20 The Inspectorate acknowledges that, as the Proposed Development is an addition to existing infrastructure, alternative sites were not considered to be a viable alternative and agrees that alternative sites do not need to be considered within the ES. It is noted that the assessment of alternatives will focus on alternative technologies, infrastructure locations, the construction strategy and best available technology (BAT) and that reasoning for the selection of the

chosen options, including a comparison of the environmental effects, will be provided in the ES.

Flexibility

2.3.21 The Inspectorate notes the Applicant's desire to incorporate flexibility into their draft DCO (dDCO) and its intention to apply a 'Rochdale Envelope' approach for this purpose. It is acknowledged that where the details of the Proposed Development cannot be defined precisely, the Applicant will apply a worst-case scenario to the assessments. The Inspectorate welcomes the reference to Planning Inspectorate Advice Note Nine 'Using the 'Rochdale Envelope'[1] in this regard.

2.3.22 The Applicant should make every attempt to narrow the range of options and explain clearly in the ES which elements of the Proposed Development have yet to be finalised and provide the reasons. At the time of application, any Proposed Development parameters should not be so wide-ranging as to represent effectively different developments. The development parameters should be clearly defined in the dDCO and in the accompanying ES. It is a matter for the Applicant, in preparing an ES, to consider whether it is possible to robustly assess a range of impacts resulting from a large number of undecided parameters. The description of the Proposed Development in the ES must not be so wide that it is insufficiently certain to comply with the requirements of Regulation 14 of the EIA Regulations.

2.3.23 It should be noted that if the Proposed Development materially changes prior to submission of the DCO application, the Applicant may wish to consider requesting a new scoping opinion.

2.3.24 The description of the Proposed Development in the ES should clearly describe what design changes have occurred since the scoping phase and explain how these changes have been considered within relevant environmental assessments. Where flexibility is sought regarding the DCO, this should be explained not only in terms of maximum parameters, but should also consider limits of deviation, location and arrangement of design proposals and phasing of construction works. This is to ensure the worst-case scenario during each phase of the Proposed Development has been adequately identified and assessed in the ES.

[1] Advice Note nine: Using the Rochdale Envelope. Available at: https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/

3. ES APPROACH

3.1 Introduction

3.1.1 This section contains the Inspectorate's specific comments on the scope and level of detail of information to be provided in the Applicant's ES. General advice on the presentation of an ES is provided in the Inspectorate's Advice Note Seven 'Environmental Impact Assessment: Process, Preliminary Environmental Information and Environmental Statements'[2] and associated appendices.

3.1.2 Aspects/matters (as defined in Advice Note Seven) are not scoped out unless specifically addressed and justified by the Applicant and confirmed as being scoped out by the Inspectorate. The ES should be based on the Scoping Opinion in so far as the Proposed Development remains materially the same as the Proposed Development described in the Applicant's Scoping Report.

3.1.3 The Inspectorate has set out in this Opinion where it has/has not agreed to scope out certain aspects/matters on the basis of the information available at this time. The Inspectorate is content that the receipt of a Scoping Opinion should not prevent the Applicant from subsequently agreeing with the relevant consultation bodies to scope such aspects /matters out of the ES, where further evidence has been provided to justify this approach. However, in order to demonstrate that the aspects/matters have been appropriately addressed, the ES should explain the reasoning for scoping them out and justify the approach taken.

3.1.4 The Inspectorate has made efforts to ensure that this Scoping Opinion is informed through effective consultation with the relevant consultation bodies. Unfortunately, at this time the Inspectorate is unable to receive hard copy consultation responses, and this may affect a consultation body's ability to engage with the scoping process. The Inspectorate also appreciates that strict compliance with COVID-19 advice may affect a consultation body's ability to provide their consultation response. The Inspectorate considers that Applicants should make effort to ensure that they engage effectively with consultation bodies and where necessary further develop the scope of the ES to address their concerns and advice. The ES should include information to demonstrate how such further engagement has been undertaken and how it has influenced the scope of the assessments reported in the ES.

3.1.5 Where relevant, the ES should reference how the delivery of measures proposed to prevent/minimise adverse effects is secured through dDCO requirements (or other suitably robust methods) and whether relevant consultation bodies agree on the adequacy of the measures proposed.

[2] Advice Note Seven: Environmental Impact Assessment: Process, Preliminary Environmental Information and Environmental Statements and annex. Available from: https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/

3.2 Relevant National Policy Statements (NPSs)

3.2.1 Sector-specific NPSs are produced by the relevant Government Departments and set out national policy for NSIPs. They provide the framework within which the Examining Authority (ExA) will make their recommendation to the SoS and include the Government's objectives for the development of NSIPs. The NPSs may include environmental requirements for NSIPs, which Applicants should address within their ES.

3.2.2 The designated NPS(s) relevant to the Proposed Development are the:

- Overarching NPS for Energy (NPS EN-1); and
- NPS for Renewable Energy: EN-3 (NPS EN-3).

3.3 Scope of Assessment

General

3.3.1 The Inspectorate recommends that in order to assist the decision-making process, the Applicant uses tables:

- to demonstrate how the assessment has taken account of this Opinion;
- to identify and collate the residual effects after mitigation for each of the aspect chapters, including the relevant interrelationships and cumulative effects;
- to set out the proposed mitigation and/or monitoring measures including cross-reference to the means of securing such measures (eg a dDCO requirement);
- to describe any remedial measures that are identified as being necessary following monitoring; and
- to identify where details are contained in the Habitats Regulations Assessment (HRA) report (where relevant), such as descriptions of National Site Network sites and their locations, together with any mitigation or compensation measures, are to be found in the ES.

3.3.2 The location of Drax Power Station is depicted on various figures within the Scoping Report; however it appears to differ in the inset maps between Figure 1.2 and Figure 2.1. The ES should include a location plan and accurately and consistently depict the location of the elements that comprise the Proposed Development. In addition, Figure 2.2 and Figure 14.3 of the Scoping Report are of poor resolution. The Applicant should ensure that the equivalent figures in the ES are of sufficient quality to make the ES content clear and accessible to readers.

3.3.3 Paragraph 2.2.19 states that capital dredging would be required if the existing Drax Jetty is upgraded to facilitate the transportation of AILs (and possibly other construction materials) to the site, and that maintenance dredging would not be required if the jetty was used only for AILs. Very limited information is provided in the Scoping Report in relation to the scale or extent of dredging activities that

may be required in relation to Drax Jetty; these should be made explicit in the ES and an assessment made of any impacts that could result in a significant effect on sensitive receptors.

3.3.4 In the event that it is decided to take forward the option to upgrade Drax Jetty, users of the River Ouse (recreational and other), should be identified and impacts on such receptors as a result of construction works and the transportation of construction materials by river should be considered in relevant technical assessments where significant effects could potentially occur.

3.3.5 The Inspectorate notes that the Scoping Report identifies the River Ouse as tidally influenced in the location of the Proposed Development. The Applicant should be aware that if the Proposed Development includes any works that take place below the mean high water springs mark, which includes the tidal extent of rivers, a marine licence under the Marine and Coastal Access Act (2009) may be required.

3.3.6 Paragraph 3.13.1 of the Scoping Report states that the Applicant proposes to scope navigational risk out of further assessment and does not intend to submit a Navigation Risk Assessment (NRA) alongside the ES. This is on the basis that the Applicant would comply with all marine legislation and byelaws and that it has been agreed with the Marine Contractor, Harbour Master and a River Ouse Pilot that a safe passage would be feasible (despite the required AIL transport vessels exceeding the published maximum dimensions for the River Ouse). It is also stated that approximately 10 deliveries would be required during construction and no vessel movements are anticipated during operation of the Proposed Development.

3.3.7 The Scoping Report does not specify which legislation and byelaws have been considered in relation to navigational risk, or how compliance would be achieved when transporting AILs and construction materials to site via the River Ouse, nor does it provide evidence of the agreement reached regarding the feasibility of a safe passage. There is also uncertainty in the Scoping Report regarding the number of vessel deliveries required during construction. For example, it is unclear if the estimated number includes the transport of construction materials other than AILs (as referenced in paragraph 2.2.19 of the Scoping Report). In addition, it is uncertain if the Applicant has considered potential effects of capital and maintenance dredging when deciding to scope out a NRA.

3.3.8 Based on the issues identified above, the Inspectorate does not agree that a NRA can be scoped out unless it is agreed with relevant consultation bodies that it may be scoped out. Evidence of such agreement should be provided in the ES. The Applicant is referred to the comments of the Canal and River Trust in this regard, contained in Appendix 2 of this Opinion. The ES should describe the baseline navigational environment and provide an assessment of impacts of navigational risk during construction, operation and decommissioning of the Proposed Development where significant effects are likely to occur.

3.3.9 The Inspectorate notes that transport of AILs to the application site via the River Ouse would need to comply with the Canal and River Trust's Port Marine Safety Code (PMSC), and lighting associated with the upgraded Drax Jetty would need

to comply with Trinity House specifications. The Applicant's attention is also drawn to the Canal and River Trust's consultation response in this regard.

Baseline Scenario

3.3.10 The ES should include a description of the baseline scenario with and without implementation of the Proposed Development as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge.

3.3.11 In light of the number of ongoing developments within the vicinity of the Proposed Development application site, the Applicant should clearly state which developments will be assumed to be under construction or operational as part of the future baseline.

3.3.12 Chapter 2 of the Scoping Report states that the Applicant has a DCO for the re-powering of two existing coal-powered generating units (Drax Repower), and has also applied for planning permission under the Town and Country Planning Act 1990 (TCPA) for demolition of Flue Gas Desulphurisation (FGD) Plant and associated restoration works. Paragraph 2.2.21 of the Scoping Report states that the Applicant may also seek development consent for the upgraded Drax Jetty and road modifications under the TCPA rather than through the DCO. The ES must clearly identify the works that are included in the application for a DCO for the Proposed Development and related works intended to be delivered under separate applications and/or alternative consent regimes. The ES should also describe the timelines for and relationship between each of these applications. The cumulative assessment should include an assessment of the likely significant effects arising from the impacts of the construction and operation of the Proposed Development together with these developments.

Forecasting Methods or Evidence

3.3.13 The ES should contain the timescales upon which the surveys which underpin the technical assessments have been based. For clarity, this information should be provided either in the introductory chapters of the ES (with confirmation that these timescales apply to all chapters), or in each aspect chapter.

3.3.14 The Inspectorate expects the ES to include a chapter setting out the overarching methodology for the assessment, which clearly distinguishes effects that are 'significant' from 'non-significant' effects. Any departure from that methodology should be described in individual aspect assessment chapters.

3.3.15 The ES should include details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information and the main uncertainties involved. Where it was not possible to access private land and baseline data was collected from publicly accessible land only this should be stated and any implications for the assessment should be explained.

Residues and Emissions

3.3.16 The EIA Regulations require an estimate, by type and quantity, of expected residues and emissions. Specific reference should be made to water, air, soil

and subsoil pollution, noise, vibration, light, heat, radiation and quantities and types of waste produced during the construction and operation phases, where relevant.

3.3.17 The Inspectorate notes that it is proposed to scope out emissions of heat, light and radiation on the basis that no significant sources of such emissions are anticipated. It is agreed that an assessment of effects from radiation may be scoped out. However, as no further information has been provided to justify this conclusion the Inspectorate does not agree that heat and light may be scoped out unless it is agreed with relevant consultees and such agreement is evidenced in the ES. An assessment of potential impacts should be provided where significant effects may occur. This may be integrated into the relevant aspect assessments rather than included in a discrete chapter.

Mitigation and Monitoring

3.3.18 Any mitigation relied upon for the purposes of the assessment should be explained in detail within the ES. The likely efficacy of the mitigation proposed should be explained with reference to residual effects. The ES should also address how any mitigation proposed is secured, with reference to specific dDCO requirements or other legally binding agreements.

3.3.19 It is noted that the Applicant intends to submit a Register of Commitments with the DCO application and to prepare a Construction Environmental Management Plan (CEMP) prior to construction, both of which will set out proposed mitigation measures. The DCO application should include all documents which contain measures relied upon within the impact assessments to mitigate the predicted effects of the Proposed Development. A draft of the CEMP should be submitted with the application. Explicit cross-reference should be provided from the ES to the relevant mitigation contained in such documents so that it is clear what measures are proposed for each of the likely significant effects identified in the ES and where each is secured.

3.3.20 It is noted that mitigation and enhancement measures are not differentiated in the technical chapters of the Scoping Report. It should be made clear in the ES which measures are intended to provide mitigation and which are intended to provide enhancement.

3.3.21 The ES should identify and describe any proposed monitoring of significant adverse effects and how the results of such monitoring would be utilised to inform any necessary remedial actions.

Risks of Major Accidents and/or Disasters

3.3.22 The ES should include a description and assessment (where relevant) of the likely significant effects resulting from accidents and disasters applicable to the Proposed Development. The Applicant should make use of appropriate guidance (eg that referenced in the Health and Safety Executive's Annex to the Inspectorate's Advice Note 11) to better understand the likelihood of an occurrence and the Proposed Development's susceptibility to potential major accidents and hazards. The description and assessment should consider the vulnerability of the Proposed Development to a potential accident or disaster

and also the Proposed Development's potential to cause an accident or disaster. The assessment should specifically assess significant effects resulting from the risks to human health, cultural heritage or the environment. Any measures that will be employed to prevent and control significant effects should be presented in the ES.

3.3.23 Relevant information available and obtained through risk assessments pursuant to national legislation may be used for this purpose. Where appropriate, this description should include measures envisaged to prevent or mitigate the significant adverse effects of such events on the environment and details of the preparedness for and proposed response to such emergencies.

Climate and Climate Change

3.3.24 The ES should include a description and assessment (where relevant) of the likely significant effects the Proposed Development has on climate (for example having regard to the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change. Where relevant, the ES should describe and assess the adaptive capacity that has been incorporated into the design of the Proposed Development. This may include, for example, alternative measures such as changes in the use of materials or construction and design techniques that will be more resilient to risks from climate change.

Transboundary Effects

3.3.25 Having considered the nature and location of the Proposed Development, the Inspectorate is not aware that there are potential pathways of effect to any European Economic Area (EEA) states but recommends that, for the avoidance of doubt, the ES details any such consideration and assessment.

A Reference List

3.3.26 A reference list detailing the sources used for the descriptions and assessments must be included in the ES.

3.4 Coronavirus (COVID-19) Environmental Information and Data Collection

3.4.1 The Inspectorate understands government-enforced measures in response to COVID-19 may have consequences for an Applicant's ability to obtain relevant environmental information for the purposes of their ES. The Inspectorate understands that conducting specific surveys and obtaining representative data may be difficult in the current circumstances.

3.4.2 The Inspectorate has a duty to ensure that the environmental assessments necessary to inform a robust DCO application are supported by relevant and up to date information. Working closely with consultation bodies, the Inspectorate will seek to adopt a flexible approach, balancing the requirement for suitable rigour and scientific certainty in assessments with pragmatism in order to support the preparation and determination of applications in a timely fashion.

3.4.3 Applicants should make effort to agree their approach to the collection and presentation of information with relevant consultation bodies. In turn the Inspectorate expects that consultation bodies will work with Applicants to find suitable approaches and points of reference to allow preparation of applications at this time. The Inspectorate is required to take into account the advice it receives from the consultation bodies and will continue to do so in this regard.

3.5 Confidential and Sensitive Information

3.5.1 In some circumstances it will be appropriate for information to be kept confidential. In particular, this may relate to personal information specifying the names and qualifications of those undertaking the assessments and/or the presence and locations of rare or sensitive species such as badgers, rare birds and plants where disturbance, damage, persecution or commercial exploitation may result from publication of the information.

3.5.2 Where documents are intended to remain confidential the Applicant should provide these as separate documents with their confidential nature clearly indicated in the title and watermarked as such on each page. The information should not be incorporated within other documents that are intended for publication or which the Inspectorate would be required to disclose under the Environmental Information Regulations 2004.

3.5.3 The Inspectorate adheres to the data protection protocols set down by the Information Commissioners Office[3] . Please refer to the Inspectorate's National Infrastructure privacy notice[4] for further information on how personal data is managed during the Planning Act 2008 process.

[3] https://ico.org.uk

[4] https://infrastructure.planninginspectorate.gov.uk/help/privacy-notice/

4. ASPECT BASED SCOPING TABLES

4.1 Climate Resilience

(Scoping Report Section 4)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.1.1	Table 4.12	Climate resilience Construction - impacts from climate change on construction of the Proposed Development Operation - impacts from climate change on operation of the Proposed Development	Although it is proposed to scope this aspect out of the ES in its entirety it is stated that in-combination climate impacts (the potential for climate change to exacerbate or diminish the potential effects identified within each of the aspect assessments) are scoped in and will be assessed within the ES cumulative effects chapter. Construction impacts are proposed to be scoped out as they have been determined as having low vulnerability due to the short construction timescale and measures that would be integrated into the CEMP to ensure the site would be prepared and responsive to extreme weather events. Operational impacts are proposed to be scoped out on the basis that they have been determined as having low vulnerability due to the embedded climate resilience measures integrated into the design of the Proposed Development. The Inspectorate does not agree that this entire aspect may be scoped out at this time. It is agreed that impacts from climate change on construction of the Proposed Development can be scoped out on the basis of the relatively short construction period. However, it is not agreed that impacts from climate change on its operation can be scoped out on the basis of the information provided at this time (see comments below). In addition, the operational lifetime of the Proposed Development is unclear. It is stated in Chapter 2 that an investment decision would be made after its expected operational life

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			of 25 years and it is explained in paragraph 4.2.17 that a design life of 60 years has been assumed for the purposes of the climate resilience assessment. It is also unclear how in-combination climate impacts will be assessed in the absence of any information on climate impacts alone. Accordingly an assessment of climate change impacts of the Proposed Development should be included in the ES. This could be contained in relevant ES chapters rather than within a discrete chapter.

ID	Ref	Other points	Inspectorate's comments
4.1.2	4.4.2	Receptors	No reference is made in the description of sensitive receptors considered within the assessment to Drax Jetty, which may potentially be upgraded as part of the Proposed Development, although the associated road modifications are mentioned. All sensitive receptors which could potentially be impacted by climate changes/events should be identified in the ES.
4.1.3	4.5.2 & other locations	Terminology - description of mitigation	References are made in this chapter to 'embedded mitigation'. This term is not used in any other chapter of the Report and it is unclear whether it has the same meaning as 'primary mitigation', as described in the Glossary and paragraph 3.7.1. Care should be taken in the ES to ensure that the terminology applied is used consistently throughout.
4.1.4	Table 4.6	Embedded construction mitigation measures	Although snow and ice are identified previously as having the potential to impact the Proposed Development they are not referenced in the construction site climate risks and so it is unclear in the description of the mitigation measures to be included in the

ID	Ref	Other points	Inspectorate's comments
			CEMP which are the measures proposed to address such impacts. This should be made clear in the ES.
4.1.5	Table 4.7	Embedded operational mitigation measures - precipitation and sea level rise	It is stated that any 'significant changes' to the impermeable areas of the upgraded Drax Jetty and the roads may require an appropriate outline drainage strategy, which will be discussed and agreed with key stakeholders. It is not explained what would be considered to constitute a significant change and is unclear at what stage this would be undertaken. If it is considered that such a strategy is required details of this should be provided with the ES and evidence of agreement with relevant stakeholders.
4.1.6	Table 4.7	Embedded operational mitigation measures - precipitation and sea level rise	It is stated that the design of the upgraded jetty will minimise works in the existing river channel 'as far as practicably feasible', however no further details are provided and it is not clear how this relates to the provision of mitigation for the potential impacts of precipitation and sea level rise on the jetty. This should be explained in the ES.
4.1.7	Table 4.7	Embedded operational mitigation measures - precipitation and sea level rise	It is set out that the need and scope for hydraulic modelling of the proposed works to the jetty will be discussed with the EA. Evidence of any agreement regarding the modelling approach, outputs and any consequent mitigation requirements, should be included in the ES or cross-reference provided to other documents as appropriate. It should be demonstrated where in the application documents any mitigation measures are secured.
4.1.8	Table 4.7	Embedded operational mitigation measures - wind and storm events	It is stated that existing structures will be reviewed for their ability to withstand future worst case wind conditions. If it is anticipated that further works/mitigation would be required these should be described in the ES and cross-reference provided to any relevant documents, including to where they are secured.

ID	Ref	Other points	Inspectorate's comments
4.1.9	Table 4.7	Mitigation - potential impacts of increased humidity	Increased humidity is identified in Section 4.4 as a climate variable that could affect the Proposed Development and relative humidity is included in Table 4.11 (Vulnerability Assessment). Humidity is not identified as a climate variable for the operational phase in Table 4.7, so no information is provided on any potential impacts and relevant climate resilience measures. This should be presented in the ES.
4.1.10	Table 4.8	Identification of potential significant effects during construction	Although snow and ice are identified previously as having the potential to impact the Proposed Development they are only mentioned as a potential source of significant effects during operation. It is not explained why potential effects arising are not considered during construction. This should be set out in the ES.
4.1.11	Tables 4.8 & 4.9	Terminology – impacts and likely significant effects (LSEs)	The Report's Glossary defines and distinguishes between impacts and LSEs. Although these tables are described in the text as presenting the potential or likely significant effects of the Proposed Development during construction and operation the titles within the tables refer to potential impacts, so it is unclear to which they refer. The assessments in the ES should clearly distinguish between potential impacts and predicted LSEs, and the terminology applied should be used consistently throughout.
4.1.12	Table 4.11	Vulnerability assessment	Although changes in sea level are identified in Section 4.4 as a climate variable that could affect the Proposed Development they are not included in the vulnerability assessment contained in Table 4.11. The Inspectorate notes that it was previously anticipated that sea level changes would not result in potentially significant effects during the construction phase, however potential effects were considered for the operational phase. Given that the Proposed Development would be located in Flood Zone 3, its vulnerability to changes in sea level should be assessed and presented in the ES.

ID	Ref	Other points	Inspectorate's comments
4.1.13	4.7.1	Methodology	The Inspectorate notes that no further information has been provided on methodology on the basis that it is proposed to scope out climate resilience (other than in respect of 'in-combination' climate impacts). In the event that this aspect is subsequently assessed in the ES full details of the methodology utilised for the assessment should be provided, including the criteria used to determine a significant effect.

4.2 Population Health and Socio-Economics

(Scoping Report Section 5)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.2.1	Table 5.1	Construction – increased demand for accommodation and community facilities due to an influx of workers	The Scoping Report proposes to scope this out on the basis that the majority of workers would be sourced from the local area (ie, Selby District Council) and the wider region and so would not increase demand for accommodation and community facilities in the area. However, the Scoping Report does not provide an indication of the number of workers that would be required to construct the Proposed Development, including 'specialist contractors' which may require accommodation in the local area. In addition, the Inspectorate notes there could be potential cumulative effects as a result of committed developments at Drax Power Station (Drax Repower, Drax FGD Plant demolition) (paragraph 6.7.8 of the Scoping Report). On the basis of the information provided the Inspectorate does not agree that this matter may be scoped out. The ES should include an assessment of these matters where significant effects are likely to occur, particularly in respect of cumulative effects associated with other committed developments.
4.2.2	Table 5.1	Construction and Operation – crime and safety	The Inspectorate has had regard to the characteristics of the Proposed Development and considers likely significant effects on crime and safety as a result of construction and operation of the Proposed Development are unlikely to occur and that this matter may be scoped out from further assessment. The ES should explain how security measures are secured in the application material.
4.2.3	Table 5.1	Construction – private property and housing	The Scoping Report proposes that potential effects to private property and housing along Carr Lane and Redhouse Lane are scoped out of this aspect chapter as they will be assessed in the Traffic and

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			Transport, Noise and Vibration, Air Quality and Landscape and Visual chapters of the ES. The Inspectorate agrees that potential effects on private property and housing can be considered within the relevant aspect chapters of the ES. Notwithstanding, the Applicant should also consider impacts on private property and housing in relation to flood risk, including whether construction of the Proposed Development could change the flood risk, within the relevant aspect chapters of the ES, eg Water Environment.
4.2.4	Table 5.1	Construction – changes in access to community land and assets	The Applicant acknowledges potential impacts to PRoW (located within the Proposed Development boundary) and Drax Golf Club car park (surrounded by the Proposed Development boundary) but concludes these are unlikely to be significant. The Inspectorate has had regard to the characteristics of the development and considers likely significant effects to community land and assets as a result of construction of the Proposed Development are unlikely to occur and can be scoped out of the ES. The ES should consider any other potential impacts on these receptors within the relevant aspect chapters.
4.2.5	Table 5.1	Construction – development land and businesses	The Scoping Report proposes to scope this matter out of further assessment on the basis that access to/from local businesses would remain open during construction, and it is not anticipated that there would be significant disruption which would affect business operations. However, no evidence has been provided to substantiate this statement. Notably, vehicle movements associated with construction of the Proposed Development are not known at this stage (see Table 6.2 of the Scoping Report) and overnight road closures would be required if transport of AILs to site was to proceed under Option 2 (see paragraph 2.2.21 of the Scoping Report). In addition, the Inspectorate notes that there could be potential

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			cumulative effects (eg, construction traffic) on development land and businesses as a result of committed development at Drax Power Station (Drax Repower, Drax FGD Plant demolition) (paragraph 6.7.8 of the Scoping Report). Therefore, the Inspectorate does not agree that this matter may be scoped out. The ES should include an assessment of these matters where significant effects are likely to occur.
4.2.6	Table 5.1	Construction and Operation – agricultural land holdings	The Inspectorate notes that agricultural land may be temporarily (to facilitate construction of road modifications) and permanently affected as a result of construction and operation of the Proposed Development. The Scoping Report proposes to scope this out of further assessment on the basis that impacts on agricultural land during construction and operation 'are likely to be minimal'. However, no evidence has been provided to substantiate this statement. In addition, the quantum and quality of agricultural land likely to be temporarily and permanently affected as a result of the Proposed Development has not been specified in the Scoping Report. Therefore, the Inspectorate does not agree that this matter may be scoped out. The ES should include an assessment of these matters where significant effects are likely to occur.
4.2.7	Table 5.1	Construction and Operation – health	It is proposed to scope this matter out as potential effects on health will be assessed in the Noise and Vibration and Air Quality chapters of the ES. The Inspectorate agrees that this matter may be scoped out on that basis.
4.2.8	5.6.1	Construction and Operation - population and health effects	The Scoping Report states "There are no likely effects of moderate or major significance anticipated to arise for Population, Health and Socioeconomic receptors. Therefore, there are no Population and Health effects which should be scoped in and assessed within the ES."

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			It is not clear what is intended by this statement as it conflicts with Table 5.1 which has scoped in impacts relating to the generation of direct and indirect employment opportunities during construction and operation of the Proposed Development. In addition, this is not a justifiable basis for scoping out matters, as effects that are predicted to be of a lower than moderate significance could contribute to a significant cumulative effect. The ES should include assessment of the matters set out above, as stated by the Inspectorate, unless it is agreed with relevant consultees that they may be scoped out and evidenced accordingly in the ES .

ID	Ref	Other points	Inspectorate's comments
4.2.9	5.2.7	Impacts on agricultural land and soil quality	The Inspectorate notes agricultural land may be temporarily and permanently affected as a result of construction and operation of the Proposed Development. The Scoping Report does not indicate that the Applicant intends to include an assessment of land quality in the ES. The Inspectorate considers the ES should include an assessment of land quality where significant effects are likely to occur. The land quality assessment should include an Agricultural Land Classification Survey (ALC) to quantify the amount of ALC grade land temporarily and permanently lost as a result of the Proposed Development and assess potential impacts on farming businesses. In addition, the land quality assessment should include a description of soil quality and provide an assessment where significant effects are likely to occur. The Applicant's attention is drawn to the Natural England consultation response in this regard.
4.2.10	5.2.7	Public Rights of Way	The Scoping Report states that the Proposed Development boundary intersects with seven PRoW however paragraph 5.2.7 lists eight

ID	Ref	Other points	Inspectorate's comments
			PRoW. The ES should describe the likely significant effects on all relevant PRoW.
4.2.11	5.7.2	Methodology	The Scoping Report states that the assessment of employment generation will be undertaken using 'Excel based analysis'. However, no further explanation of this has been provided. The ES should clearly describe the methodology used for the population, health and socio-economic assessment, including the criteria used to determine the significance of effects. Socio-economic impacts resulting from the Proposed Development should be quantified where possible. Where professional judgement has been applied this should be clearly stated and suitably justified in the ES with reference to supporting evidence.

4.3 Transport

(Scoping Report Section 6)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.3.1	N/A	N/A	No matters are proposed to be scoped out.

ID	Ref	Other points	Inspectorate's comments
4.3.2	6.2.6	Baseline	The Inspectorate notes that it is proposed to utilise the traffic flow data collected for the Drax Repower DCO application on the basis that it includes traffic surveys for all of the junctions and links within the study area for the Proposed Development. The relevance of the data should be demonstrated and clearly presented within the ES.
4.3.3	6.3.1	Study area	It is stated that the proposed transport study area is the same as that used for the Repower application but the Report does not include a plan depicting the study area. It is unclear whether it includes the roads that would be utilised in the event that Drax Jetty is upgraded and used for the transportation of construction materials, and whether the Repower traffic flow data encompasses those roads. The traffic flow data should be supplemented as necessary if the affected roads were not previously included. The finalised study area should be depicted on a figure in the ES that identifies all sensitive receptors, including PRoW and bridleways, that could be affected by the Proposed Development.
4.3.4	Section 6.5	Mitigation	It is unclear why Section 6.5 only refers to tertiary mitigation during construction. The ES should include details of all forms of mitigation required for all phases of the Proposed Development.

ID	Ref	Other points	Inspectorate's comments
4.3.5	Section 6.5	Mitigation	Along with a Construction Traffic Management Plan and Public Rights of Way Management Plan reference is made to a Construction Worker Travel Plan. Draft plans should be submitted with the application material and demonstrably secured in the DCO.
4.3.6	Table 6.3	Methodology - construction timetable	The construction timetable contained in this chapter differs to the timetable presented in Chapter 2. Such information should be presented consistently throughout the ES so that it is clear that the potential for different effects arising during different phases of construction has been reflected in the assessment.
4.3.7	6.7.7	Methodology – operation	Staffing levels at the Drax Power Station during the operational phase are anticipated to be less than existing levels as a result of the two remaining coal-powered units ceasing operation in March 2021. However, the construction timetable subsequently described for the repowering of up to two of those units indicates that the peak construction years for that project would end in 2026. On that basis the number of operational staff could potentially be either the same as the existing number or higher at the same time that the Proposed Development becomes operational (2027/2028). The ES should justify and assess the worst case operational year.

4.4 Air Quality

(Scoping Report Section 7)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.4.1	Table 7.1	Construction - emissions of nitrogen oxides (NOx) and PM_{10} from construction vehicles leaving and accessing the Proposed Development and construction plant	Detailed construction traffic volume and movements generated by the Proposed Development are currently unknown but that 'fewer than 100 HDV' would be generated on a daily basis as an annual average, and taking into account baseline air quality, the distance of receptors from the site boundary and the nature of the works it is considered that there is no realistic potential for significant effects from vehicles. It is also explained that appropriate control measures will be included within the Register of Commitments for inclusion in the CEMP. The Inspectorate agrees that this matter may be scoped out as long as evidence of traffic volume and movements is provided in the ES to substantiate the assumption that there will be fewer than 100 Heavy Duty Vehicles (HDV)/day, and on the basis that the construction traffic route would not affect any Air Quality Management Areas (AQMAs). Should the number be high enough to potentially result in significant air quality effects this matter should be scoped in and an assessment provided in the ES.
4.4.2	Table 7.1	Operation - emissions of NOx and PM_{10} from operational vehicles leaving and accessing the Proposed Development	It is stated in the Scoping Report that changes to operational traffic volumes would not trigger Institute of Air Quality Management (IAQM) criteria for assessment of impacts (ie, 500 vehicles/100 heavy goods vehicles (HGV) per day outside an AQMA) and consequently there is no potential for significant effects. The Inspectorate agrees that this matter may be scoped out as long as evidence of traffic volume and movements is provided in the ES to substantiate the assumption that there will be fewer than 500 vehicles/100 HDV per day. Should it be predicted that the number

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			would be high enough to potentially result in significant effects this matter should be scoped in and an assessment provided in the ES.

ID	Ref	Other points	Inspectorate's comments
4.4.3	7.1.1	Clarification	This chapter is described as setting out the proposed methodology for the historic environment assessment. The Inspectorate assumes that this was a textual error and was intended to refer to the air quality assessment.
4.4.4	7.2.2	Baseline conditions - surveys	The Inspectorate notes that no project-specific air quality surveys are proposed at this stage. This approach should be discussed and agreed with relevant consultation bodies.
4.4.5	7.3.1	Study area	It is explained in the Report that the operational study area extends 15km in all directions from the 'Proposed Scheme'. It should be specified in the ES from where that begins, such as, for example, the application site boundary. The methodology used to determine the extent of the study area should be clearly set out in the ES. The study area must be sufficient to encompass all likely significant effects arising from the Proposed Development. The Applicant is referred to the comments of Doncaster Council in this regard, in relation to the location of the receptors that would experience the maximum ground-level impacts of the emissions from the Power Station main stack.
4.4.6	Section 7.5	Mitigation – construction and operation	Limited information is provided on potential mitigation measures. The ES should provide details of proposed measures, identify where and how they are secured, and specify which predicted effects they are intended to address.

ID	Ref	Other points	Inspectorate's comments
4.4.7	7.7.3 & 7.7.4	Methodology - modelling	Details of the models used to assess atmospheric dispersion and chemical reactions associated with amines should be provided in the ES.
4.4.8	7.7.7	Methodology - legislation	It is stated that "*emissions from the Proposed Development will be taken, where available, from the limits set in the Industrial Emissions Directive (IED)".* The ES should demonstrate that this is a valid assumption for the proposed operation.

4.5 Noise and Vibration

(Scoping Report Section 8)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.5.1	Table 8.3	Operation – vibration generated by the Proposed Development	It is proposed to scope this matter out on the basis that there are no sensitive receptors closer than 50m from any proposed potential sources of vibration and therefore the industrial activities associated with operation would not be expected to generate vibration levels that would be significant. The Inspectorate considers that insufficient information has been provided in the Scoping Report to justify scoping this matter out at this time. It is not explained what the characteristics of the vibration sources are likely to be and on what the 50m limit is based, and no evidence has been provided to substantiate the statement that there no sensitive receptors within 50m, since distances under 100m are reported as 'less than 100m'. The 'Initial List of Sensitive Receptors' contained in Table 8.2 only identifies properties and does not include the other potentially sensitive receptors identified in paragraph 8.4.1. In addition it is explained that consideration will be given to other receptors once more information on the Proposed Development becomes available. Accordingly, the ES should include an assessment of this matter where significant effects are likely to occur, unless it is subsequently agreed with relevant consultation bodies that it would not give rise to any likely significant effects. Such agreement should be evidenced in the ES.
4.5.2	Table 8.3	Operation – transportation-related noise and vibration impacts arising from the Proposed Development	It is proposed to scope this matter out on the basis that changes to transport as a result of the operation of the Proposed Development would not be expected to change traffic flows on the road network by

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			more than 10% and therefore would not result in significant noise and vibration effects. The Inspectorate agrees that this matter may be scoped out according to the justification provided, as long as the traffic flow modelling supports the assertion about the predicted change in traffic flows. Cross-reference should be made as appropriate from the ES Noise and Vibration chapter to the relevant traffic data.

ID	Ref	Other points	Inspectorate's comments
4.5.3	8.2.2 & 8.4.2	Baseline	Reference is made to the use for this assessment of baseline information gathered as part of the White Rose Carbon Capture and Storage and Drax Repower DCO applications. The relevance of the data should be demonstrated and clearly presented within the ES. Care should be taken to ensure that the baseline information for the Proposed Development encompasses the total area within which it could give rise to significant effects, and it should be supplemented as necessary.
4.5.4	Section 8.3	Study area	The basis for defining the proposed study areas is not explained in the Report. The study areas to be used for the assessment should be sufficiently broad to encompass all receptors that could experience significant effects arising from the Proposed Development, and the rationale for determining the extent of the study areas should be explained in the ES.
4.5.5	8.7.3	Methodology	In relation to the construction phase of the upgraded Drax Jetty it is stated that additional monitoring of underwater noise will be undertaken to inform the assessment if needed. The assessment

ID	Ref	Other points	Inspectorate's comments
			should also include consideration of potential vibration impacts during construction on the structural integrity of the existing river bank.
4.5.6	8.7.5 & 8.7.6	Methodology	It is stated that noise modelling will be undertaken to inform the construction and operational assessments. A detailed modelling report should be provided in the ES setting out the model assumptions and results.
4.5.7	Table 8.3 & paragraph 8.7.7	Methodology	It is explained that the assessment of noise and vibration effects on biodiversity receptors will be presented in the ES Ecology chapter. Clear cross-reference should be made from the ES Noise and Vibration chapter to the location of the relevant information within the Ecology chapter.

4.6 Ecology

(Scoping Report Section 9)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.6.1	Table 9.4	Construction and Operation - loss or disturbance of common and widespread habitats of negligible nature conservation importance	The Scoping Report proposes to scope this matter out of the assessment on the basis that impacts "*are not expected to lead to significant effects*". However, no evidence has been provided in the Scoping Report to substantiate this statement. In addition, the Scoping Report does not clearly describe the criteria used to determine the nature conservation importance of habitats. Therefore, the Inspectorate does not agree that this matter may be scoped out and the ES should include an assessment of these matters where significant effects are likely to occur, unless it is agreed with relevant consultation bodies that they may be scoped out, and this is evidenced accordingly in the ES.
4.6.2	Table 9.4	Construction and Operation - temporary disturbance of common and widespread species of negligible nature conservation importance	The Scoping Report proposes to scope this matter out of the assessment on the basis that effects "*will be managed through generic control measures*" and "*are not expected to lead to significant effects*". However, no evidence has been provided in the Scoping Report to substantiate these statements and 'generic control measures' are not clearly described. In addition, the Scoping Report does not clearly describe the criteria used to determine the nature conservation importance of habitats. Therefore, the Inspectorate does not agree that this matter may be scoped out and the ES should include an assessment of these matters where significant effects are likely to occur, unless it is agreed with relevant consultation bodies that they may be scoped out, and this is evidenced accordingly in the ES.

ID	Ref	Other points	Inspectorate's comments
4.6.3	9.2.1	Baseline data	The Scoping Report states that existing environmental information for two other projects (FGD Plant and Drax Repower) will be used to inform the ES. Where existing ecological information sourced from other projects has been relied upon for the purposes of the baseline assessment this should be clearly described in the ES, and evidence should be presented that such baseline data is representative and fit for purpose. The Applicant should seek agreement with the relevant consultation bodies regarding the suitability of existing baseline data and evidence this within the ES.
4.6.4	Table 9.1	Potential Zones of Influence (ZoIs)	The Scoping Report does not clearly explain how the potential ZoIs for 'Nationally important designated nature conservation sites' (5km), 'Locally important designated nature conservation sites' (2km) and 'Priority Habitats, protected and notable species' (100m, 500m) have been determined. The ES should clearly describe how each ZoI has been defined according to the sensitivity of the receiving environment and potential impacts during construction, operation and decommissioning of the Proposed Development. The Applicant should seek agreement with the relevant consultation bodies regarding the ZoI of the Proposed Development and evidence this within the ES.
4.6.5	9.3.3	Study area - statutory designated sites	The Scoping Report provides conflicting statements about the ZoI for statutory designated sites. For example, Table 9.1 refers to a radius of 15km from the 'Proposed Scheme' whilst paragraph 9.3.3 refers to sites 'within 10km of the Site Boundary'. The ES should clearly describe the ZoIs used for each of the ecological assessments and ensure they are consistently reported in the ES.
4.6.6	Table 9.2	Receptors - Humber Estuary SPA, Ramsar and SSSI	The Inspectorate notes that the upgraded Drax Jetty would be located upstream of the Humber Estuary SPA, Ramsar and SSSI. The Applicant should consider impacts to mobile species for which these

ID	Ref	Other points	Inspectorate's comments
			sites have been designated such as, for example, migrating lamprey, during construction of the Proposed Development. The ES should provide an assessment of these matters where significant effects are likely to occur. The Applicant's attention is drawn to Natural England's consultation response in this regard.
4.6.7	Table 9.2	Receptors - regional and locally designated sites	Based on the information presented in the Scoping Report, it is unclear if potential impacts to regional and locally designated sites will be considered in the ES. The ES should identify regional and locally designated sites within an agreed study area and provide an assessment where significant effects are likely to occur. The Applicant's attention is drawn to Natural England's consultation response in this regard.
4.6.8	9.5.1	Mitigation	The Applicant should seek agreement with the statutory nature conservation bodies (SNCBs) regarding the suitability of the proposed mitigation and its efficacy and evidence this in the ES. The ES should describe the mechanism through which mitigation shall be secured in the DCO. The ES should also consider environmental impacts resulting from the implementation of proposed mitigation (eg. habitat creation) and provide an assessment of these where significant effects are likely to occur. The Applicant should also consider opportunities for off-site mitigation/enhancement as part of the Proposed Development. The Applicant's attention is drawn to the EA's consultation response in this regard.
4.6.9	Table 9.4	Likely significant effects - Loss and/or disturbance of protected species and their habitats due to demolition and construction activities, including construction traffic.	Although the description of the impact in Table 9.4 refers only to construction activities it is indicated below 'Phase' and 'Justification' that loss and/or disturbance of protected species and their habitats matter will also be scoped in to the operational assessment. For the avoidance of doubt, the Inspectorate has assumed that this matter will be assessed for both the construction and operational stages

ID	Ref	Other points	Inspectorate's comments
			where significant effects are likely to occur, and considers that a proportionate assessment should also be provided for the decommissioning phase.
4.6.10	Table 9.4	Likely significant effects - Disruption of ecological networks provided by habitats that will be lost, altered, or disturbed by construction.	Although the description of the impact and the phase in Table 9.4 refer only to construction it is indicated below 'Justification' that disruption of ecological networks provided by habitats that will be lost, altered, or disturbed will also be scoped in to the operational assessment. For the avoidance of doubt, the Inspectorate has assumed that this matter will be assessed for both the construction and operational stages where significant effects are likely to occur, and considers that a proportionate assessment should also be provided for the decommissioning phase.
4.6.11	9.7.2	Methodology - NSIP Advice Note 10 (The Planning Inspectorate, 2016)	Planning Inspectorate 'Advice Note Ten: Habitats Regulations Assessment relevant to Nationally Significant Infrastructure Projects' (AN10) was updated in 2017. The Applicant should ensure that the ES has regard to the most recent version of advice and guidance and reference this accordingly in the ES.
4.6.12	9.7.4 and 9.7.5	Methodology - ecological surveys	Paragraph 9.7.4 of the Scoping Report only states which protected species surveys are being considered and paragraph 9.7.5 provides limited information in relation to timings of WBS and Great Crested Newt surveys. The ES should clearly set out which specific ecological surveys have been used to inform the assessment, including survey timings and methodologies. The Applicant should seek agreement with the relevant consultation bodies regarding the ecological survey requirements associated with the Proposed Development and evidence this in the ES.
4.6.13	2.2.19	Aquatic ecology and dredging within the River Ouse	The Scoping Report states that construction of the upgraded Drax Jetty may require capital dredging and maintenance dredging within

ID	Ref	Other points	Inspectorate's comments
			the River Ouse. The Inspectorate notes that Table 13.3, Chapter 13 of the Scoping Report indicates that impacts to biological quality elements of the River Ouse will be included in the assessment. However, it is not apparent that the ES will include an assessment of potential effects of dredging on aquatic ecological receptors, including the spread of Invasive Non-Native Species (INNS) via vessels transporting AILS and construction materials to site (eg, ballast water, accidents, spillages). For the avoidance of doubt, the ES should describe the method, timing, duration, volume of material and location of dredging works and provide an assessment of these matters where significant effects are likely to occur. The Applicant's attention is drawn to the Canal and River Trust and EA consultation responses in this regard.
4.6.14	3.11.4	Biodiversity Net Gain (BNG)	The Inspectorate notes the Applicant intends to submit a BNG assessment alongside the ES. The BNG assessment should be undertaken in accordance with industry best practice and any requirements introduced by the Environment Bill, where relevant. The Applicant's attention is drawn to the EA and North Yorkshire County Council consultation responses in this regard.

4.7 Landscape and Visual Impact

(Scoping Report Section 10)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.7.1	N/A	N/A	No matters are proposed to be scoped out.

ID	Ref	Other points	Inspectorate's comments
4.7.2	10.2.2 & 10.2.3	Baseline data	The Scoping Report states that the Landscape and Visual Impact Assessment (LVIA) conducted for Drax Repower and the 'Landscape and Mitigation Report' (Weddle, 1966) will be used to inform the LVIA for the Proposed Development. Existing LVIA documentation relating to other projects that has been relied upon for the purposes of the baseline assessment should be clearly described and referenced in the ES, and evidence should be included that demonstrates that the existing baseline data is representative and fit for purpose. The Applicant should seek agreement with relevant consultation bodies regarding the suitability of existing baseline data and evidence this in the ES.
4.7.3	10.2.3	Baseline - users of the River Ouse	Based on the information presented in the Scoping Report, it is unclear if potential visual impacts on users of the River Ouse will be considered in the LVIA. The ES should provide an assessment of this matter where significant effects are likely to occur. The Applicant's attention is drawn to Public Health England's consultation response in this regard.
4.7.4	10.3.3 & 10.7.2	Zone of Visual Influence (ZVI) and Zone of Theoretical Visibility (ZTV)	The Scoping Report refers to the application of both a ZVI and ZTV in relation to the LVIA. In addition, it appears these are often used interchangeably within the Scoping Report (eg, heritage chapter).

ID	Ref	Other points	Inspectorate's comments
			However, the Guidelines for Landscape and Visual Assessment (GLVIA) Third Edition (2018)[5] now recommend that ZTV is used, whereby potential screening (eg, vegetation, buildings) are not considered when mapping the theoretical visibility of the Proposed Development. The Inspectorate considers that the Applicant should avoid referring to a ZVI and refer only to an agreed ZTV in the LVIA and other relevant chapters of the ES.
4.7.5	10.5.1 & 10.7.7	Mitigation	The Scoping Report suggests that mitigation planting may be considered as mitigation for the Proposed Development. The ES should provide a clear description of any landscaping and planting proposals that will form on-site or off-site mitigation. The ES should also explain how mitigation planting will take into account the time taken for planting to reach maturity and become fully effective. The Applicant should seek agreement with relevant consultation bodies regarding the suitability of proposed mitigation and evidence this in the ES. The ES should describe the mechanism through which mitigation shall be secured in the DCO.
4.7.6	10.7.2	Methodology - ZTV	The ZTV should be based on the relevant maximum parameters of the Proposed Development and informed using site surveys to establish an accurate visual envelope. Where flexibility is sought in the DCO, the LVIA should provide an assessment of the worst-case scenario as defined in the ES. In addition, where assumptions have been made in the LVIA regarding the design of the Proposed Development this should be clearly explained in the ES. The Applicant should seek agreement with relevant consultation bodies regarding the LVIA approach, including an agreed ZTV and evidence this in the ES. The Applicant's attention is drawn to the Historic England, North

[5] Guidelines for Landscape and Visual Impact Assessment (GLVIA) 3rd Edition (2018)

ID	Ref	Other points	Inspectorate's comments
			Yorkshire County Council and Selby District Council consultation responses in this regard. If appropriate, the ZTV and LVIA should also consider impacts of plumes generated by the Proposed Development.
4.7.7	10.7.3	Viewpoints to be included in the LVIA	The Scoping Report lists nine viewpoints that may be included in the LVIA (subject to site survey and detailed design). Six of these have been taken from the LVIA conducted for Drax Repower and three new viewpoints are proposed. Where pre-determined viewpoints have been relied upon for the purposes of the LVIA this should be clearly stated in the ES, including evidence that these are representative of the Proposed Development. The Applicant should seek agreement with the relevant consultation bodies regarding the location and number of viewpoints and subsequent photomontages. The location of viewpoints should be illustrated in a suitable figure. The Applicant's attention is drawn to the North Yorkshire County Council, Selby District Council and Canal and River Trust's consultation response in this regard.
4.7.8	10.7.6	Methodology - cumulative effects	The Scoping Report states, "*Cumulative Effects with any other proposed development of a similar type within the Study Area will be considered in the assessment*". It is unclear why consideration of cumulative landscape and visual effects has been limited to projects of a 'similar type' to the Proposed Development. In addition, the Scoping Report does not state how the 'type' of development would be defined. The ES should include all development types within the agreed study area with potential to cause likely significant cumulative effects as a result of construction, operation and decommissioning of the Proposed Development. The Applicant should seek agreement with the relevant consultation bodies regarding the extent of the

ID	Ref	Other points	Inspectorate's comments
			study area and developments to be included in the cumulative impact assessment and evidence this in the ES.
4.7.9	10.8.1	Methodology - potential effects of day-time and night-time lighting as a result of construction and operation of the Proposed Development.	The Scoping Report states, "*Assessment of the effects of lighting during the Construction Phases will not be included on the basis that it would be temporary and within the context of existing operational lighting*". However, the location and parameters of temporary lighting have yet to be defined. In addition, the Scoping Report suggests construction may occur outside of standard working hours (07:00-19:00). Therefore, the Inspectorate cannot conclude that temporary lighting will not result in likely significant effects. As night-time lighting may be required during construction and operation of the Proposed Development this should be considered when determining the ZTV. The Applicant should seek agreement with the relevant consultation bodies regarding the suitability of the ZTV, including any requirements for night-time surveys to establish existing lighting conditions within and surrounding the Proposed Development site. The ES should include an assessment of day-time and night-time lighting during construction and operation of the Proposed Development where significant effects are likely to occur. The night-time lighting assessment should reference the ecology chapter (and vice-versa) where relevant in the ES.
4.7.10	10.8.1	Residential Visual Amenity Assessment (RVAA)	The Inspectorate is content that the assessment of visual impacts on residential receptors based on representative viewpoints from publicly accessible locations and professional judgement is sufficient for the purposes of the ES and that a separate RVAA is not required.

ID	Ref	Other points	Inspectorate's comments
4.7.11	N/A	Sympathetic design	The ES should explain how the design of the Proposed Development, including the materials used, have been selected with the intention of minimising potential impacts on landscape and visual receptors identified in the LVIA. The Applicant's attention is drawn to North Yorkshire County Council's consultation response in this regard.

4.8 Heritage

(Scoping Report Section 11)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.8.1	N/A	N/A	No matters are proposed to be scoped out.

ID	Ref	Other points	Inspectorate's comments
4.8.2	11.2.1	Baseline data	The Scoping Report suggests that the Heritage Impact Assessment (HIA) undertaken for the Drax Repower application will be used to inform the HIA for the Proposed Development. Evidence should be included in the ES to demonstrate that the existing baseline data is representative and fit for purpose. The Applicant should seek agreement with relevant consultation bodies regarding the suitability of existing baseline data and evidence this in the ES.
4.8.3	11.2.1	Baseline – Non-Designated Heritage Assets (NDHA)	The Scoping Report indicates third party sources will be used to establish the presence of heritage assets within and beyond the Proposed Development boundary. The ES should establish whether NDHAs are present within and beyond the Proposed Development boundary. The Applicant's attention is drawn to North Yorkshire County Council's consultation response in this regard.
4.8.4	11.3.1 – 11.3.4	Study areas	The Scoping Report proposes a 10km study area for the assessment of designated heritage assets and an inner 500m study area for the assessment of non-designated heritage assets (above and below-ground). However, the Scoping Report provides little explanation as to how these study areas have been determined. The ES should

ID	Ref	Other points	Inspectorate's comments
			clearly describe how study areas have been defined according to the sensitivity of the receiving environment and potential impacts during construction, operation and decommissioning of the Proposed Development. The study area for the HIA should be informed using an agreed ZTV. The Applicant should seek agreement with the relevant consultation bodies regarding the study areas used to inform the HIA and evidence this in the ES. The Applicant's attention is draw to Historic England's consultation response in this regard.
4.8.5	11.3.1	Study area - approach to the assessment	The HIA should consider potential impacts arising from all elements of the Proposed Development, including ancillary infrastructure where significant effects are likely to occur. The Applicant should seek agreement with the relevant consultation bodies regarding the approach to the HIA, for example, the Conservation Officer of Selby District Council and archaeological staff of North Yorkshire County Council. The Applicant's attention is drawn to Historic England's consultation response in this regard.
4.8.6	11.6.1	Effects - underwater heritage assets and capital and maintenance dredging	The Scoping Report states that construction of the upgraded Drax Jetty may require capital dredging and maintenance dredging within the River Ouse. However, based on the information presented in the Scoping Report, it is unclear if potential impacts to underwater heritage assets will be considered in the ES. The ES should provide an assessment of underwater heritage where significant effects are likely to occur.
4.8.7	Table 11.1	Effects - demolition of existing buildings	Table 11.1 of the Scoping Report states "*The proposals do not include the demolition of any existing buildings so no direct, physical impacts are anticipated on Non-Designated built Heritage Assets within the Site Boundary*". However, this conflicts with paragraph 2.2.23 of the Scoping Report which indicates that demolition/of temporary buildings and infrastructure and existing electrostatic precipitators are

ID	Ref	Other points	Inspectorate's comments
			likely to be required during construction of the Proposed Development. The ES should provide an assessment of direct, physical impacts on NDHAs as a result of any demolition works where significant effects are likely to occur.
4.8.8	Table 11.1	Impacts of drainage on heritage assets within the site boundary.	The ES should consider potential impacts to below ground heritage assets as a result of alteration to drainage patterns and subsequent damage (decomposition, destruction) to archaeological remains and deposits. In addition, subsidence of above ground heritage assets (buildings, monuments) as a result of alteration to drainage patterns should also be considered in the ES. The ES should provide an assessment of these matters where significant effects are likely to occur. The Applicant's attention is drawn to Historic England's consultation response in this regard.

4.9 Ground Conditions

(Scoping Report Section 12)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.9.1	Table 12.1	Operation – impacts to future users, third party neighbours, potable water supply and plants from contamination within the underlying soils/groundwater.	The Scoping Report proposes to scope this matter out on the basis that "*Contaminants found during the Construction Phase will be remediated in line with proposed uses*" and "*Clean cover layers and imported materials, if required, will be validated for depth and chemical quality prior to use of the Proposed Development*". However, no evidence has been provided in the Scoping Report to substantiate these statements. In addition, measures to be included in the CEMP, (remediation, validation), have not been described in sufficient detail to establish the efficacy of proposed mitigation. Therefore the Inspectorate does not agree that this matter may be scoped out. The ES should provide a clear description of remediation and validation measures and the mechanisms through which they would be secured. It should include an assessment of these matters, including the potential impacts of remediation works where significant effects are likely to occur. The Inspectorate notes that Table 12.1 refers to an 'operation management plan' (OMP). However, this OMP is not described and no reference is made to it elsewhere in the Scoping Report. The ES should clearly identify the management plans relied upon for the purpose of mitigating likely significant effects of the Proposed Development.

ID	Ref	Other points	Inspectorate's comments
4.9.2	12.2.1	Baseline - New Road historic landfill site	Paragraph 2.1.8 of the Scoping Report indicates that the New Road historic landfill site is located in the proposed Environmental Mitigation Area within the Proposed Development boundary. However, the landfill site is not mentioned in the description of baseline ground conditions. Therefore, it is not apparent that potential impacts associated with the landfill site (eg, migration of contaminants, ground gas) will be considered in the ground conditions assessment. The ES should provide an assessment of these matters where significant effects are likely to occur.
4.9.3	12.3.1	Study areas	The Scoping Report proposes a 250m study area for the assessment of human health receptors and 1km for the assessment of controlled waters. However, the Scoping Report provides little explanation as to how these study areas have been determined. The ES should clearly describe how study areas have been defined according to the sensitivity of the receiving environment and potential impacts during construction, operation and decommissioning of the Proposed Development. The Applicant should seek agreement with the relevant consultation bodies regarding the study areas used to inform the assessment of ground conditions and evidence this in the ES.
4.9.4	12.3.1 & 12.7.5	Receptors	The Scoping Report proposes that only human health and controlled water receptors will be considered in the ground conditions assessment. However, the Inspectorate considers that the ground conditions assessment should also take into account ecological receptors likely to be significantly affected during construction, operation and decommissioning of the Proposed Development. The Ground Conditions assessment should also reference the Ecology and Water Environment ES chapters (and vice-versa) where relevant. The Applicant should seek agreement with the relevant consultation

ID	Ref	Other points	Inspectorate's comments
			bodies regarding the receptors to be included in the ground conditions assessment. The Inspectorate notes that the definition of sensitive receptors provided in paragraph 12.3.1 (human health, controlled water) conflicts with the definition provided in paragraph 12.7.5 (human health, controlled waters, buildings, services). The ES should provide a clear and consistent description of the sensitive receptors considered in the assessment.
4.9.5	12.7.12	Methodology - short, medium and long-term effects	The Applicant should ensure that short, medium and long-term effects are clearly defined in the ES, including any assumptions made with regard to the duration of potential effects as a result of construction, operation and decommissioning of the Proposed Development.

4.10 Water Environment

(Scoping Report Section 13)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.10.1	N/A	N/A	No matters are proposed to be scoped out.

ID	Ref	Other points	Inspectorate's comments
4.10.2	2.2.12	Description of development – water abstraction and discharge	Paragraph 2.2.12 of the Scoping Report states that there would be no change to current water abstraction or discharge into the River Ouse as a result of the Proposed Development in relation to Cooling Option A. It is not indicated whether any changes to existing abstractions or discharges would be required if Option B was implemented. If any changes are required, the ES should provide an assessment of impacts where significant effects are likely to occur. The Applicant should seek agreement with the relevant consultation bodies regarding future abstraction/discharge requirements and variations to licences/consents if required. The Applicant's attention is drawn to the Canal and River Trust and EA consultation responses in this regard.
4.10.3	13.4.1	Receptors – existing water supply and sewerage infrastructure	The Inspectorate notes that there is existing water supply and sewerage infrastructure located within the Proposed Development site boundary. The ES should demonstrate that reasonable attempts have been made to avoid or reduce impacts on the existing water supply and sewerage infrastructure, through the design and layout of the Proposed Development. The location of the existing water supply and sewerage infrastructure should be clearly illustrated in appropriate figures in the ES. The Applicant's attention is drawn to Yorkshire Water's consultation response in this regard.

ID	Ref	Other points	Inspectorate's comments
4.10.4	13.2.1	Baseline conditions	The Applicant should also consider Strategic Flood Risk Assessments (SFRAs) produced by relevant planning authorities when establishing the baseline conditions within the Proposed Development boundary in the ES.
4.10.5	13.2.1	Baseline data	The Scoping Report states that existing environmental information from other projects (Drax Repower) will be used to inform the ES. Where environmental assessment information compiled for other projects has been relied upon for the purposes of the baseline assessment this should be clearly described in the ES, including evidence that the existing baseline data is representative and fit for purpose. The Applicant should seek agreement with the relevant consultation bodies regarding the suitability of existing baseline data and evidence this within the ES.
4.10.6	13.2.2	Baseline – inter-relationship between aspects	The Scoping Report identifies ordinary watercourses in proximity to the Proposed Development boundary which may provide suitable habitat for otters and water vole. The water environment assessment should reference and inform the ecology chapter (and vice-versa) where relevant in the ES.
4.10.7	13.2.6	Baseline – River Derwent SAC and SSSI	The Scoping Report proposes to scope these designated sites out of the ES (although this is not reflected in Table 13.3) on the basis that they are located 1km upstream of the Proposed Development site and therefore unlikely to be affected by it. On that basis that the River Derwent SSSI/SAC is located upstream of the Proposed Development the Inspectorate agrees that this designated site can be scoped out of the Water Environment assessment of the ES. The specified distance between the Proposed Development and the River Derwent SAC/SSSI varies within the Scoping Report. For example, paragraph 2.1.12 states it is 700m to the north and

ID	Ref	Other points	Inspectorate's comments
			paragraph 9.4.2 states it is 0.1km to the north east. The location from which receptor distances have been calculated should be clearly explained and consistently reported in the ES.
4.10.8	13.2.19	Flood Zones	The Scoping Report states that the Proposed Development lies within Flood Zone 3. However, the Scoping Report does not specify if this is Flood Zone 3a or Flood Zone 3b. The ES should clearly describe the Flood Zones within which the Proposed Development is situated and distinguish between Flood Zone 3a and Flood Zone 3b where appropriate. It is considered that a plan may be useful in this regard.
4.10.9	13.2.19	Environmental Mitigation Area	Based on the information presented in the Scoping Report it appears that the proposed Environmental Mitigation Area is located within Flood Zone 3. The ES should consider whether any works in the Environmental Mitigation Area undertaken during construction and operation of the Proposed Development would have the potential to affect the existing functions of that land in relation to flood risk and provide an assessment of these matters where significant effects are likely to occur.
4.10.10	13.3.1, 13.3.2 & 13.3.3	Study area	The Scoping Report proposes a 0.5km study area for the assessment of direct effects on surface water receptors and a 1km study area for the assessment of indirect effects on surface and ground water receptors and assessment of flood risk. However, the Scoping Report provides little explanation as to how these study areas have been determined. The ES should clearly describe how study areas have been defined according to the sensitivity of the receiving environment and potential impacts during construction, operation and decommissioning of the Proposed Development. The Applicant should seek agreement with the relevant consultation bodies regarding the study areas used to inform the Water Environment assessment and evidence this in the ES.

ID	Ref	Other points	Inspectorate's comments
4.10.11	13.5.1	Design, mitigation and enhancement Measures - diversion of watercourses	The Scoping Report states that watercourses located within the area proposed for the road modifications (Redhouse Lane, Carr Lane, New Road) may need to be diverted to prevent a reduction in their existing capacity. The Inspectorate notes that diversion of watercourses is not mentioned in the description of works associated with the upgraded Drax Jetty and road modifications (paragraph 2.2.19 - 2.2.22, Scoping Report). The ES should include a clear description of the location, extent, design and works associated with diversion of watercourses during construction of the Proposed Development. The ES should provide an assessment where significant effects are likely to occur and cross-reference the ecology chapter (and vice-versa) where relevant. The ES should demonstrate that reasonable attempts have been made to avoid or reduce impacts on diverted watercourses, through the design of the Proposed Development and/or appropriate mitigation measures.
4.10.12	Table 13.3	Effects - flood risk to adjacent receptors and Drax Power Station	The Inspectorate notes that although reference is made to operation under 'Phase' in relation to flood risk to adjacent receptors and Drax Power Station the information provided relates only to construction, so it is unclear whether it is intended that this matter is scoped in. For the avoidance of doubt, The Inspectorate confirms that the ES should provide an assessment of this matter for the construction, operation and decommissioning phases of the Proposed Development where significant effects are likely to occur.
4.10.13	13.7.4	Flood Risk Assessment (FRA)	Paragraph 13.7.4 of the Scoping Report states that a FRA will be submitted alongside the ES. The drainage strategy supporting the FRA should consider use of Sustainable Drainage Systems (SuDS). Paragraph 4.2.32 of the Scoping Report states that the Proposed Development site is located within Flood Zone 3 and benefits from

ID	Ref	Other points	Inspectorate's comments
			existing flood defences on the River Ouse. It also mentions that the River Ouse is tidally influenced, with minor fluvial contributions. The FRA should include an assessment of the potential impacts of breach and overtopping events on the Proposed Development where significant effects are likely to occur. In addition, the FRA should consider the latest climate change allowances. The Applicant's attention is drawn to the Yorkshire Water and EA consultation responses in this regard.

4.11 Materials and Waste

(Scoping Report Section 14)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.11.1	14.6.2	Operation - the assessment of potential impacts and effects from process chemicals, eg amine solvent, caustic soda, anti-foam and sulphuric acid	It is proposed to scope this matter out on the basis of the 'tertiary mitigation measures already adopted' and professional judgement. However, no information is provided on what these mitigation measures comprise other than identifying environmental permitting as an example. In the absence of details of the potential impacts and the measures proposed to mitigate these impacts the Inspectorate is unable to agree that this matter may be scoped out. The ES should include a description of potential impacts arising from the use of process chemicals and provide an assessment where significant effects are likely to occur.
4.11.2	Table 14.7	Construction and operation - impacts associated with the extraction of raw resources and the manufacture of products	It is proposed to scope out the impacts and effects of extraction and manufacture of materials according to the justification that they cannot be assured with any accuracy. The Inspectorate does not consider that lack of available information or data is an appropriate basis for scoping out matters from assessment. It would be usual to assume a worst case scenario in such circumstances and make an assessment on that basis. However, the Inspectorate agrees that this particular matter may be scoped out subject to the inclusion of a description of the nature and quantity of the materials and natural resources used during the construction and operational phases of the Proposed Development within the ES.
4.11.3	14.6.2 & Table 14.7	Operation - consumption of material resources associated with	It is stated that the Proposed Development is not anticipated to consume material resources beyond those required for routine repair and maintenance in the first year of operation, and that the impacts

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
		the Proposed Development during the first year of operation	and effects from chemicals, including amine solvent, consumed as part of the processes have been excluded from further assessment as they already fall within the existing environmental permitting regime for the site. It is therefore concluded that the impacts would be minimal and not significant. However, this appears to conflict with a statement in Table 16.3 (Chapter 16: Major Accidents and Disasters) that indicates that the Proposed Development is expected to result in changes to emissions of amines which would require a variation to the site's existing environmental permit (EP). It is considered that in determining the proposed variation the EA would set emission limits on amines together with a requirement to implement appropriate mitigation measures to prevent harm to environmental receptors. The Inspectorate notes that the EA's consultation response indicates that amine pollutants would need to be controlled through the varied EP. No information is provided in the Scoping Report on the submission of an application to the EA to vary the existing EP. The Inspectorate agrees that this matter may be scoped out on the basis that a variation to the existing EP will be sought, which would control potential impacts from use of amines, as long as information on the application is provided in the ES, including on the timelines for the application and its decision. The Applicant is referred to the information contained in the EA's consultation response on the activities that would be controlled by the varied EP and the information that the permit application should contain. In addition, the ES should provide a description of the nature and quantity of the materials and natural resources used during the operational phase.
4.11.4	14.6.2 & Table 14.7	Operation - disposal and recovery of waste associated with the	It is considered that operation of the Proposed Development beyond the first year of commissioning is anticipated to generate only minimal waste arisings from routine maintenance and repairs, and explained that the impacts and effects from wastes generated from

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
		Proposed Development beyond the first year of operation	site by-products have been excluded from further assessment on the basis of the 'tertiary mitigation measures already adopted' and as they already fall within the existing environmental permitting regime for the site. it is therefore concluded that the impacts associated with waste generation and disposal would be minimal and not significant. However, no information is provided on what the mitigation measures comprise, other than the environmental permitting regime. In the absence of details of the measures proposed to mitigate potential impacts the Inspectorate is unable to agree that this matter may be scoped out. The ES should include a description of potential impacts arising from the disposal and recovery of waste and provide an assessment where significant effects are likely to occur.
4.11.5	Table 14.7	Construction and operation - impacts resulting from the transportation of material resources and waste to and from the Proposed Development	It is proposed to scope this matter out since transportation effects will be considered as part of the air quality, traffic and transport and noise and vibration assessments. The Inspectorate agrees that this matter may be scoped out on the basis that the potential impacts will be reported within the corresponding ES technical chapters.
4.11.6	Table 14.7	Construction and operation - impacts and effects on human health and controlled waters as a result of contaminated site arisings from the Proposed Development	It is stated that impacts and effects on human health and controlled waters will be considered in the geology and soils assessment. The Inspectorate assumes that this was intended to refer to the ground conditions assessment and agrees that this matter may be scoped out from the Materials and Waste ES chapter as long as an assessment of it is contained within another technical chapter/other technical chapters in the ES as appropriate such as, for example, Ground Conditions.

ID	Ref	Other points	Inspectorate's comments
4.11.7	14.2.21	Baseline – waste	It is stated that no data exists on the current generation of waste within the proposed application site boundary but it is anticipated (using professional judgement) that it is minimal in the context of available regional capacity. The Inspectorate expects baseline data on current waste generation to be provided in the ES. Where it is not available estimates of waste types should be provided together with an explanation of on what they are based.
4.11.8	14.6.10	Likely significant effects – material assets	Reference is made to the potential construction of 'a' new cooling tower whereas the description of the Proposed Development in Chapter 2 of the Report refers to 'cooling towers', which implies more than one tower. The description of the Proposed Development must be consistent throughout the ES and the assessments must reflect the maximum parameters as set out in the DCO. Where the 'Rochdale Envelope' approach is applied and a number of options are under consideration each of the options must be assessed and reported in the ES, and the worst case scenarios must be considered.

4.12 Greenhouse Gases

(Scoping Report Section 15)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.12.1	Table 15.5	Construction - disposal of waste	It is proposed to scope this matter out because emissions from the disposal of waste are unlikely to be large due to a large proportion of construction waste being inert. It is agreed that emissions from the final disposal of waste may be scoped out on this basis. However, as the transport of waste is not mentioned it is unclear whether it is intended to additionally scope that matter out. Emissions would be generated by vehicles transporting the waste offsite. It is stated in the Materials and Waste chapter that waste volumes arising from the Proposed Development are not yet available and in the absence of that data it is considered that the generation and disposal of waste could result in a significant effect. For the avoidance of doubt, in the absence of information on waste volumes to be disposed during construction it is not agreed that emissions from the transport of construction waste may be scoped out at this time.
4.12.2	Table 15.5	Construction - land use, land use change and forestry	It is proposed that these matters are scoped out, however the only justification provided is in relation to emissions from land use change during construction, which states that they are 'not expected to be large'. On the basis of this very limited justification, and also noting that a change in emissions associated with land use change is identified in Table 15.3 as a key source that could give rise to a significant effect, the Inspectorate does not agree that these matters may be scoped out. An assessment should be provided where significant effects are likely to occur.

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.12.3	Table 15.5	Construction - electricity used for lighting	It is proposed to scope this matter out on the basis that lighting is not anticipated to be an emissions source as there would be no change to lighting. It is stated in the description of the Proposed Development in Chapter 2 of the Report that temporary lighting would be provided during construction; however it is agreed that this matter can be scoped out as the emissions would be unlikely to be large given the relatively short duration of the construction phase.
4.12.4	Table 15.5	Operation - maintenance	It is agreed that maintenance associated with the Proposed Development can be scoped out on the basis that it would not be a large emissions source as only a small amount would be required in addition to the maintenance that already takes place.
4.12.5	Table 15.5	Operation - repair	It is agreed that this matter can be scoped out on the basis that the Proposed Development is designed to be maintained rather than repaired and that therefore subsequent repair emissions sources are unlikely to be large.
4.12.6	Table 15.5	Operation - land use, land use change and forestry during	It is agreed that this matter can be scoped out on the basis that the reduction in carbon sequestration due to the land use change is unlikely to be large.

ID	Ref	Other points	Inspectorate's comments
4.12.7	Section 15.5	Mitigation	High level information only is provided on proposed mitigation for the construction and operational phases of the Proposed Development. The Inspectorate notes that it is stated that mitigation measures will be developed further in the ES and expects full details to be provided.

ID	Ref	Other points	Inspectorate's comments
4.12.8	Section 15.7	Methodology	It is stated in the Report there are no clear thresholds for what level of GHG emissions can be considered significant in an EIA context and that significance is assessed through the best practice technique of comparing estimated GHG emissions arising from the Proposed Development with the respective UK carbon budget and taking into account professional judgement. Assessments of significance based on professional judgement should be fully justified.

4.13 Major Accidents and Disasters

(Scoping Report Section 16)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.13.1	16.6.4	Potential vulnerability to Major Accident and Disaster (MA&D) risks - low likelihood and low consequence events	The Scoping Report proposed to scope these matters out on the basis that "*these events are unlikely to result in significant adverse effects as they do not fall into the definition of a MA&D*". Provided that the ES addresses concerns regarding significance criteria and that low likelihood and low consequence events are clearly defined, the Inspectorate agrees that these matters can be scoped out. However, the ES should clearly demonstrate that low likelihood and low consequence events have been appropriately addressed in the relevant aspect chapters. The Applicant should seek agreement with the relevant consultation bodies regarding the definition of low likelihood and low consequence events and evidence this in the ES.
4.13.2	Section 16.6	Potential vulnerability to MA&D risks resulting in accidental release of CO_2 and other pollutants	It is unclear whether the Applicant intends to undertake an assessment of the potential impacts of the accidental release of CO_2 and other pollutants in the event that a major accident or disaster occurred. Although the risk of this occurring may be low the consequences of such an event could be significant. Given that the Proposed Development is an emerging technology for which design and safety information is currently limited, the Inspectorate considers that the ES should identify potential accidents or disasters that could lead to an accidental release of pollutants from the carbon capture infrastructure and provide an assessment of potential impacts where significant effects could occur.

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.13.3	16.6.4	Potential vulnerability to MA&D risks - high likelihood and low consequence events	The Scoping Report proposed to scope these matters out on the basis that "*they will not lead to significant adverse effects*". Provided that the ES addresses concerns regarding significance criteria and that high likelihood and low consequence events are clearly defined, the Inspectorate agrees that these matters can be scoped out. However, the ES should clearly demonstrate that high likelihood and low consequence events have been appropriately addressed in the relevant aspect chapters. The Applicant should seek agreement with the relevant consultation bodies regarding the definition of high likelihood and low consequence events and evidence this in the ES.
4.13.4	16.6.4	Potential vulnerability to MA&D risks - high likelihood and high consequence events	The Scoping Report proposed to scope these matters out on the basis that "*existing legislation (see Appendix A) and regulatory controls would not permit the Proposed Scheme to be progressed under these circumstances*". Provided that the ES addresses concerns regarding significance criteria whereby high likelihood and high consequence events are clearly defined in the ES, and on the basis that the Proposed Development would not receive consent if high likelihood and high consequence events were to occur, the Inspectorate agrees that these matters can be scoped out of the ES. However, the ES should clearly describe how these matters have been identified and how unacceptable risk has been avoided/managed through risk assessment and the design process.
4.13.5	16.3.4	Potential Vulnerability to MA&D risks - occupational health and safety	The Scoping Report proposes to scope this matter out on the basis that impacts would be prevented through existing health and safety legislation, including The Management of Health and Safety at Work Regulations 1999, The Workplace (Health, Safety and Welfare) Regulations 1992 and the Dangerous Substances and Explosive Atmospheres Regulations 2002. On the basis that potential impacts to on-site workers are addressed through existing health and safety

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			legislation, the Inspectorate agrees that this matter can be scoped out of the assessment.
4.13.6	16.3.4	Study area - accidents and disasters unlikely to occur due to the location of the Proposed Development	The Scoping Report proposes to scope out some Major Accident and Disaster event types out on the basis that these were "*highly unlikely to occur due to the location of the Proposed Scheme, based on information provided by environmental topic teams and use of information sources related to Accidents and Disasters (BGS, 2020) (Prevention Web Europe 2005)*". On the basis that no impact pathway exists between the Proposed Development and accidents/disasters identified, and provided that the ES addresses concerns regarding the agreed study area the Inspectorate agrees these matters can be scoped out.
4.13.7	Table 16.3	Construction and Operation - Natural Hazards, including: earthquakes; volcanic activity; landslides; sink holes; tsunamis; coastal flooding; avalanches; cyclones; hurricanes; typhoons; storms; gales; thunderstorms; wave surges; extreme temperatures; droughts; solar flares; solar energetic particles; coronal mass ejections; fog; wildfires; poor air quality; disease epidemics; zoonotic diseases; and plants	Based on the information presented in the Scoping Report and considering the nature of the Proposed Development, the Inspectorate agrees that these matters can be scoped out of the ES. Notwithstanding, the Applicant should demonstrate that low consequence events in relation to poor air quality and plants (ie, invasive plant species) have been appropriately addressed in the relevant aspect chapters of the ES.
4.13.8	Table 16.3	Construction and Operation - Technological or Manmade	Based on the information presented in the Scoping Report and considering the nature of the Proposed Development, the

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
		Hazards, including: extensive public demonstrations; widespread damage to societies and economies; the need for large-scale multi-faceted humanitarian assistance; the hindrance or prevention of humanitarian assistance by political and military constraints; significant security risks for humanitarian relief workers in some areas; famine; displaced population; nuclear; fuel storage; dam breaches; mines/caverns; rail transport; aviation; air pollution accidents; electricity failure; gas failure; water supply; sewage system; unexploded ordnance; chemical/nuclear attacks; malicious attacks (chemical, nuclear, transport systems, crowded places, cyber, infrastructure); bridge failure; mast/tower collapse; property/bridge demolition accidents; and tunnel failure.	Inspectorate agrees that these matters can be scoped out of the ES. Notwithstanding, the ES should consider potential impacts associated with the accidental release of CO_2 and other pollutants as requested in ID 4.13.2 of this Scoping Opinion.
4.13.9	Table 16.3	Construction and Operation - Major Accident Hazard pipelines	The Scoping Report proposes to scope this matter out on the basis that identified pipelines are located sufficiently far away from the Proposed Development and if work is needed within a pipeline's Consultation Zone (CZ) the risk would be required to be as low as reasonably practicable (ALARP) under existing health and safety

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			(H&S) legislation. It is explained in Chapter 2 of the Scoping Report that a proposed National Grid pipeline would transport the compressed CO_2 from its treatment location at Drax to its storage location under the North Sea. It is anticipated that the connection to the pipeline would be at the northern boundary of Drax Power Station. Given the proximity of this proposed pipeline to the Proposed Development the Inspectorate does not agree that this matter may be scoped out and considers that an assessment of potential impacts and a description of relevant control measures should be provided in the ES.

ID	Ref	Other points	Inspectorate's comments
4.13.10	Table 16.1	Significance criteria	The 'Definition' of Major Accident provided in Scoping Report states that the significance of effect '*will take into account the extent, severity and duration of harm and the sensitivity of the Receptor'*. The ES should provide a clear description of the criteria used to determine the significance of likely effects, including how extent, severity, duration and sensitivity have been defined. The definition of sensitivity should consider the adaptability, tolerance and recoverability of each receptor identified in the Major Accidents and Disasters assessment of the ES. The Applicant should also consider the effort required to restore the affected environment when determining the significance of likely effects. The Applicant should seek agreement with the relevant consultation bodies regarding the criteria used in the determination of significant effects and evidence this in the ES.
4.13.11	Table 16.1	Vulnerability	The 'Definition' of Vulnerability provided in the Scoping Report states "*Vulnerability is influenced by sensitivity, adaptive capacity and*

ID	Ref	Other points	Inspectorate's comments
			Magnitude of Impact". The ES should provide a clear description of the criteria used to determine the vulnerability of receptors, including how sensitivity, adaptive capacity and impact magnitude have been defined. The definition of magnitude should consider the extent, duration, frequency and severity of each potential impact identified in the major accidents and disasters assessment in the ES. The Applicant should seek agreement with the relevant consultation bodies regarding the criteria used in the determination of vulnerability and evidence this in the ES.
4.13.12	Table 16.1	Consultation Distance (CD), Consultation Zone (CZ) and Control of Major Accident Hazards (COMAH)	The ES should specify the CD set by the Health and Safety Executive (HSE) in relation to the Proposed Development and describe interactions with other COMAH establishments within the CZ where significant effects are likely to occur. The ES should have particular regard for COMAH sites within the Proposed Development site boundary. The Applicant's attention is drawn to HSE's consultation response in this regard.
4.13.13	16.3.3 & Table 16.2	Study Area - receptors	The Inspectorate notes that types of receptor are identified in paragraph 16.3.3 and 'key major events receptors' are specifically identified in Table 16.2. It is unclear which receptors have been considered in relation to the potential impacts identified in the Scoping Report. The ES should clearly set out the receptors included in the major accidents and disasters assessment. The Applicant should seek agreement with the relevant consultation bodies regarding the receptors to be considered in the assessment and evidence this in the ES.
4.13.14	Table 16.3	COMAH establishments	Table 16.3 of the Scoping Report states that there are no other COMAH sites within 5km of the Drax Power Station other than Drax Power Station itself. The Inspectorate notes that the extent of this study area deviates from the extent of the study area specified in

ID	Ref	Other points	Inspectorate's comments
			paragraph 16.3.1 (2.5km). The Applicant should describe all the study areas used to inform the major accidents and disasters assessment and ensure these are consistently reported in the ES. In addition, the Inspectorate is aware that two other COMAH sites are located within the Proposed Development boundary, as identified in HSE's consultation response (see Appendix 2 of this Opinion), impacts on which should be assessed in the ES where significant effects are likely to occur.

4.14 Cumulative Effects

(Scoping Report Section 17)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.14.1	N/A	N/A	No matters are proposed to be scoped out.

ID	Ref	Other points	Inspectorate's comments
4.14.2	N/A	General	Limited information is provided on other plans and projects that will be considered in the inter-project cumulative assessment and potential significant effects. A few examples are provided of projects that it is anticipated will be included. Whilst it is understood that it is not intended to comprise an exhaustive list at this stage, the projects do not include the Drax Flue Gas Desulphurisation Demolition project at Drax Power Station, highlighted in Chapters 2, 6 and 9, the programme for which would overlap with the construction of the Proposed Development, whereas the other projects referenced in the Report are listed. This should be included.
4.14.3	17.2.1 & 17.2.9	Consultation	The assessment methodology and the short list of projects to be assessed should be consulted on and agreed where possible with the relevant consultation bodies including the local planning authorities. The Applicant's attention is drawn to Doncaster Council's consultation response, which highlights some projects that they consider should be included in the cumulative assessment.
4.14.4	17.2.3 & 17.2.5	Methodology	No reference is made to climate change resilience, which is proposed to be scoped out in its entirety apart from in relation to intra-project combined effects. It is unclear how this aspect would be assessed in the absence of an ES chapter as it is stated that the assessment of

ID	Ref	Other points	Inspectorate's comments
			combined effects will be based on the information provided within the technical chapters.
4.14.5	Section 17.2	Methodology	It is noted that it is stated in the LVIA chapter of the Scoping Report that only similar types of development to the Proposed Development will be considered in the cumulative assessment. The ES should include all development types within the agreed study area with potential to cause likely significant cumulative effects as a result of the construction, operation and decommissioning of the Proposed Development.

5. INFORMATION SOURCES

5.0.1 The Inspectorate's National Infrastructure Planning website includes links to a range of advice regarding the making of applications and environmental procedures, these include:

- Pre-application prospectus[6]
- Planning Inspectorate advice notes[7]:
  - Advice Note Three: EIA Notification and Consultation;
  - Advice Note Four: Section 52: Obtaining information about interests in land (Planning Act 2008);
  - Advice Note Five: Section 53: Rights of Entry (Planning Act 2008);
  - Advice Note Seven: Environmental Impact Assessment: Process, Preliminary Environmental Information and Environmental Statements;
  - Advice Note Nine: Using the 'Rochdale Envelope';
  - Advice Note Ten: Habitats Regulations Assessment relevant to nationally significant infrastructure projects (includes discussion of Evidence Plan process);
  - Advice Note Twelve: Transboundary Impacts;
  - Advice Note Seventeen: Cumulative Effects Assessment; and
  - Advice Note Eighteen: The Water Framework Directive.

5.0.2 Applicants are also advised to review the list of information required to be submitted within an application for Development as set out in The Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009.

[6] The Planning Inspectorate's pre-application services for applicants. Available from: https://infrastructure.planninginspectorate.gov.uk/application-process/pre-application-service-for-applicants/

[7] The Planning Inspectorate's series of advice notes in relation to the Planning Act 2008 process. Available from: https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/

APPENDIX 1: CONSULTATION BODIES FORMALLY CONSULTED

TABLE A1: PRESCRIBED CONSULTATION BODIES[8]

SCHEDULE 1 DESCRIPTION	ORGANISATION
The Health and Safety Executive	Health and Safety Executive
The National Health Service Commissioning Board and the relevant clinical commissioning group (CCG)	NHS England
The relevant Clinical Commissioning Group	NHS East Riding of Yorkshire Clinical Commissioning Group
	NHS Vale of York Clinical Commissioning Group
Natural England	Natural England
The Historic Buildings and Monuments Commission for England	Historic England
The relevant fire and rescue authority	Humberside Fire and Rescue Service
	North Yorkshire Fire and Rescue Service
The relevant police and crime commissioner	Office of the Police & Crime Commissioner for Humberside
	Office of the Police & Crime Commissioner for North Yorkshire
The relevant parish council, or, where the application relates to land [in] Wales or Scotland the relevant community council	Camblesforth Parish Council
	Barlow Parish Council
	Drax Parish Council
	Long Drax Parish Council
	Barmby on the Marsh Parish Council
The Environment Agency	The Environment Agency

[8] Schedule 1 of The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (the 'APFP Regulations')

SCHEDULE 1 DESCRIPTION	ORGANISATION
The Maritime and Coastguard Agency	Maritime & Coastguard Agency
	The Maritime and Coastguard Agency - Hull Marine Office
The Marine Management Organisation (MMO)	Marine Management Organisation (MMO)
The Civil Aviation Authority	Civil Aviation Authority
Integrated Transport Authorities (ITAs) and Passenger Transport Executives (PTEs)	South Yorkshire Passenger Transport Executive
The relevant strategic highways company	Highways England
The Coal Authority	The Coal Authority
The relevant internal drainage board	Yes - Selby Area Internal Drainage Board
The Canal and River Trust	The Canal and River Trust
Trinity House	Trinity House
Public Health England, an executive agency of the Department of Health	Public Health England
The Crown Estate Commissioners	The Crown Estate
The Forestry Commission	Forestry Commission
The Secretary of State for Defence	Ministry of Defence

TABLE A2: RELEVANT STATUTORY UNDERTAKERS[9]

STATUTORY UNDERTAKER	ORGANISATION
The relevant Clinical Commissioning Group	NHS East Riding of Yorkshire Clinical Commissioning Group
	NHS Vale of York Clinical Commissioning Group

[9] 'Statutory Undertaker' is defined in the APFP Regulations as having the same meaning as in Section 127 of the Planning Act 2008 (PA2008)

STATUTORY UNDERTAKER	ORGANISATION
The National Health Service Commissioning Board	NHS England
The relevant NHS Trust	Yorkshire Ambulance Service NHS Trust
Railways	Network Rail Infrastructure Ltd
	Network Rail
Road Transport	Southampton City Council
Canal or Inland Navigation Authorities	The Canal and River Trust
Dock and Harbour authority	Port of Goole
Civil Aviation Authority	Civil Aviation Authority
Licence Holder (Chapter 1 Of Part 1 Of Transport Act 2000)	NATS En-Route Safeguarding
Universal Service Provider	Royal Mail Group
Homes and Communities Agency	Homes England
The relevant Environment Agency	The Environment Agency
The relevant water and sewage undertaker	Yorkshire Water
The relevant public gas transporter	Cadent Gas Limited
	Last Mile Gas Ltd
	Energy Assets Pipelines Limited
	ES Pipelines Ltd
	ESP Networks Ltd
	ESP Pipelines Ltd
	ESP Connections Ltd
	Fulcrum Pipelines Limited
	Harlaxton Gas Networks Limited
	GTC Pipelines Limited
	Independent Pipelines Limited
	Indigo Pipelines Limited

STATUTORY UNDERTAKER	ORGANISATION
	Murphy Gas Networks limited
	Quadrant Pipelines Limited
	National Grid Gas Plc
	Scotland Gas Networks Plc
	Southern Gas Networks Plc
The relevant electricity distributor with CPO Powers	Eclipse Power Network Limited
	Last Mile Electricity Ltd
	Energy Assets Networks Limited
	ESP Electricity Limited
	Fulcrum Electricity Assets Limited
	Harlaxton Energy Networks Limited
	Independent Power Networks Limited
	Leep Electricity Networks Limited
	Murphy Power Distribution Limited
	The Electricity Network Company Limited
	UK Power Distribution Limited
	Utility Assets Limited
	Vattenfall Networks Limited
	National Grid Electricity Transmission Plc

TABLE A3: SECTION 43 LOCAL AUTHORITIES (FOR THE PURPOSES OF SECTION 42(1)(B))[10]

LOCAL AUTHORITY[11]
Selby District Council

[10] Sections 43 and 42(B) of the PA2008

[11] As defined in Section 43(3) of the PA2008

LOCAL AUTHORITY[11]
Harrogate Borough Council
Ryedale District Council
Scarborough Borough Council
North Lincolnshire Council
Leeds City Council
Wakefield Metropolitan District Council
Doncaster Metropolitan Borough Council
City of York Council
Hull City Council
East Riding of Yorkshire Council
North Yorkshire County Council
Yorkshire Dales National Park
North York Moors National Park
Redcar and Cleveland Borough Council
Bradford Metropolitan District Council
Darlington Borough Council
Middlesbrough Borough Council
Stockton-on-Tees Borough Council
Durham County Council
Lancashire County Council
Cumbria County Council

APPENDIX 2: RESPONDENTS TO CONSULTATION AND COPIES OF REPLIES

CONSULTATION BODIES WHO REPLIED BY THE STATUTORY DEADLINE:
Cadent
Canal & River Trust
Civil Aviation Authority
Doncaster Council
Durham County Council
Environment Agency
Forestry Commission
Health and Safety Executive
Historic England
Hull City Council
Lancashire County Council
Last Mile
Leeds City Council
Marine Management Organisation
Ministry of Defence
NATS
National Grid
Natural England
Network Rail
North Lincolnshire Council
North Yorkshire County Council (joint response with Selby District Council)
North Yorkshire Fire and Rescue Service

North York Moors National Park Authority
Public Health England
Redcar & Cleveland Borough Council
Selby District Council (joint response with North Yorkshire County Council)
Stockton-on-Tees Borough Council
The Coal Authority
Yorkshire Water

From:	[redacted]
To:	DraxBECCS
Subject:	RE: [EXT] EN010120 - Drax Bioenergy with Carbon Capture and Storage - EIA Scoping Notification and Consultation
Date:	20 January 2021 08:30:40
Attachments:	~WRD0000.jpg

Dear Alison,

Thank you for your email. I can confirm that this looks to be outside of Cadent's operational area and therefore at this stage I have no comments to make.

Kind Regards
Vicky

Vicky Cashman
Senior Land & Consents Officer
Capital Delivery

Cadent
Windsor Street, Birmingham, B7 4DN
[redacted]
cadentgas.com

Canal & River Trust
Making life better by water

The Planning Inspectorate
3D Eagle Wing
Temple Quay House
2 The Square
Bristol
BS1 6PN

Your Ref EN010120-000019-210119

Our Ref IPP-127

Wednesday 10 February 2021

Dear Sir/Madam

Planning Act 2008 (as amended) and the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

Application by Drax Power Limited for an Order granting Development Consent for the Drax Bioenergy with Carbon Capture and Storage Project – Scoping Consultation and duty to make available information to the Applicant if requested.

Waterway: River Ouse

Thank you for your consultation on the above Scoping Consultation.

The Trust are the charity who look after and bring to life 2000 miles of canals & rivers. Our waterways contribute to the health and wellbeing of local communities and economies, creating attractive and connected places to live, work, volunteer and spend leisure time. These historic, natural and cultural assets form part of the strategic and local green-blue infrastructure network, linking urban and rural communities as well as habitats. By caring for our waterways and promoting their use we believe we can improve the wellbeing of our nation.

The Trust is the Navigation Authority and Harbour Authority for the River Ouse to the west of the Drax Power Station site. Our primary interest in this proposal is to ensure that there are no adverse impacts on navigation on the river or upon general navigational safety.

The DCO site boundary extends to the west bank of the River Ouse, which includes proposals for the existing jetty area. We note that the proposed main power station itself would be sited more than 500m from the river.

Based on the information available, we wish to provide the following general comments on the Scoping Consultation:

Noise and Vibration

There is a risk that vibrations caused by building works in proximity to Drax Jetty could result in a loss in the structural stability of the river bank.

We note that noise and vibration impacts arising from the construction of the scheme are proposed to be scoped in, which we welcome. Chapter 8, however, does not specifically refer to the risk of vibrations on the structural integrity of the existing river bank. As a result, **we advise that the consideration of the impacts of**

vibrations associated with the construction of the jetty should be expanded to include consideration of the impact on the structural integrity of the river bank in proximity to the proposed works.

This would be required to ensure that the impact of this part of the development does not adversely impact land stability, which is a material planning consideration, as highlighted by paragraphs 170 (part e) and 178 of the National Planning Policy Framework (NPPF) and the Planning Practice Guidance (e.g. Paragraph 001 Reference ID: 45-001-20140306).

Ecology

We welcome the consideration given to the use of Drax Jetty for Abnormal Indivisible Loads (para 2.2.19).

Development at the Jetty has the potential to impact upon the water quality and biodiversity of the River Ouse. Works to the jetty may require dredging or bed levelling to accommodate craft, or the removal of vegetation around the facility. Additional lighting may also be required.

The Scoping Report identifies that areas close to Drax Jetty support habitats of greater ecological interest (para 9.4.3). We therefore advise that the Environment Statement should seek to specifically address any impact to the local environment caused by the construction or and use of the Jetty.

The use of a Preliminary Ecological Appraisal and species specific surveys, as proposed in paragraph 9.2.6, are likely to be appropriate to assess the likely impacts of development in this location. **We strongly advise that these surveys should include specific information with regards to the specific impact of dredging works on the Jetty, and the impact of any new lighting, to local biodiversity associated with the River Ouse.**

Landscape/Visual Impact

The proposed development will impact the user experience of boaters utilising the River Ouse.

We welcome 10.7 of the Scoping Report, which proposes the use of a Landscape and Visual Impact assessment, utilising several viewpoints around the site. We welcome the consideration of view points associated with the jetty, which would be the primary area of change associated with the river.

Reading the plan that shows the extent of surrounding landscape impacted, we advise that **an additional viewpoint further north up the River, looking over the environmental mitigation area towards the power station could also be considered to help to better access visual impact on the wide rural open views associated with the waterway.**

We would welcome the provision of a map, with the view points shown, alongside the ES, which would be useful to help third parties assess the impact of the proposals.

Navigational Risk Assessment

We note that paragraph 3.13.1 confirms that Navigation Risk will be scoped out of future assessment.

Paragraph confirms that vessel required for the movement of abnormal indivisible loads on the river will be larger than the published maximum dimensions of the River Ouse. The Trust are Harbour Authority on the River Ouse at this point, and the jetty would come under our harbour area. Works and operations would need to comply

with the Trust's Port Marine Safety Code (PMSC). Lighting on the jetty would likely need to comply with Trinity House specifications to ensure that craft can be navigated correctly on the river.

As harbour authority, the Trust can consider proposals for the maximum vessel size to be exceeded, but only where all identified risks have been mitigated. This includes consideration of vessel size, handling characteristics, a detailed passage plan, and other criteria.

We welcome confirmation that the Environment Statement will include confirmation from the Harbour Master that safe passage of the vessels sought would be feasible. **Approval from the Trust is not guaranteed, and we advise that the applicant should contact the Trust's Harbourmaster at the earliest opportunity to ensure that any written consent in principle can be provided prior to the submission of the Environment Statement. The Trust's harbourmaster Stuart McKenzie can be contacted at [redacted]@canalrivertrust.org.uk**

We advise that the Statement should also include specific information, where possible, on the size of vessel sought, and confirmation that the vessel can be accommodated past pinch points at Goole Railway Bridge.

Other Comments

Paragraph 2.2.12 of the Scoping Report highlights that no changes are proposed to the existing water abstraction and discharge from the Ouse. We advise that should this change, the applicant should liaise with the Trust so that the Trust can assess any impact caused by any alteration to abstraction and discharge from the river.

The Trust would welcome the opportunity to provide more information to the applicant on the proposed boat movements on the River Ouse associated with the jetty. For more information, the applicant may wish to contact the Trust's harbourmaster Stuart McKenzie at [redacted]@canalrivertrust.org.uk

In our capacity as navigation and harbour authority of the River Ouse, we wish to remind the applicant that the works associated with the Jetty will likely require compliance with the Trust's Code of Practice for Third Party Works. The is very pertinent in the case of this site, as the works would require works in proximity to the river bank. The applicant/developer is advised to contact the Trust's Works Engineering Team via switchboard on 0303 040 4040 or Enquiries.TPWNorth@canalrivertrust.org.uk in order to ensure that any necessary consents are obtained and that the works will comply with Trust's 'Code of Practice for Works Affecting the Canal & River Trust'.

I hope that the information above is of use. If you require more information, please feel free to contact me on the details below.

Yours sincerely,

Simon Tucker MRTPI
Area Planner

[redacted]@canalrivertrust.org.uk
[redacted]

https://canalrivertrust.org.uk/specialist-teams/planning-and-design

Canal & River Trust
Fradley Junction, Alrewas, Burton-upon-Trent, Staffordshire DE13 7DN
T 0303 040 4040 E canalrivertrust.org.uk/contact-us W canalrivertrust.org.uk

From:	Airspace
To:	DraxBECCS
Subject:	RE: EN010120 - Drax Bioenergy with Carbon Capture and Storage - EIA Scoping Notification and Consultation
Date:	10 February 2021 11:19:35
Attachments:	~WRD000.jpg

Dear Alison,

The CAA has no comments to make on this proposal.

Kind regards,

Ashley

Ashley Dawkins
Airspace Regulation
Safety & Airspace Regulation Group
Civil Aviation Authority

Tel: [redacted]

www.caa.co.uk
Follow us on Twitter: @UK_CAA

Doncaster Council

PLANNING CONSULTATION RESPONSE

Application No	21/00181/CON
Proposal	Proposed Drax Bioenergy with Carbon Capture and Storage Project
Address	Drax Power Limited Drax Power Station Selby North Yorkshire

Date of Consultation Reply	16.02.2021
Consultee	Development Management (Planning Services). Mrs Alicia Murray Principal Planning Officer [redacted]@doncaster.gov.uk [redacted]

Doncaster Council

Consultation Assessment and Justification:

Ecological Impacts

The Ecological Impact Assessment and Scoping Report (WSP January 2021) is considered to cover all of the information required to move this application to EIA stage. However, DMBC Ecology Officers have outlined that further information could be provided (outside of DMBC remit but relevant to the development as a whole):

- The loss of arable land (to the proposed environmental mitigation area) and the protection of the Best and Most Versatile (BMV) soils.
- Is it expected that stored fuel pellets will create leachate and if so how will this be managed?
- If the use of fossil fuels is to be ceased and replaced wholly by biofuel and carbon capture will this result in the cessation of flue gas desulphurisation?
- And if this is the case will this mean no more rail transportation of limestone from the Peak District through: Derbyshire, South Yorkshire, and North Yorkshire?

Air Quality Impacts

The assessment proposal described in Section 7 follows recognised guidance and procedures to identify the likely impacts on air quality from the proposed development.

The study area is currently defined as 15km; this is acceptable as long as this is the extent of the predicted significant impacts.

Section 7.4.3 describes that the maximum impacts are likely to be at distances over 10km from the development site. It is likely that receptors in Doncaster are potentially subject to increased emissions from the development, therefore an appropriate number of suitable receptors within the Borough should be identified to reflect this. This may include receptors within Air Quality Management Areas (AQMAs) or areas close to the objective such as Thorne and these can be identified through the Annual Status Reports or by discussion with the local Air Quality Team.

Section 17 discusses the approach to cumulative effects. In terms of air quality, please note that there are other large emitters proposed which are likely to have an impact on both human receptors and ecological receptors in the Doncaster area. DMBC are currently aware of the Keady Power Station Complex and an Energy from Waste installation in Kirk Sandall, Doncaster (pending consideration ref: 20/01774/TIPA). These should be considered as cumulative impacts cannot be ruled out at this stage.

Transportation

Based on the location of the proposals and its proximity to Doncaster, I would expect the impacts to be negligible but DMBC would still like to be consulted when further assessment work is carried out.

Heritage Impact

The EIA Scoping Report identifies a study area of 10km radius from the application site. This is a sufficient zone of influence to cover potential impacts on the setting of heritage assets and includes part of DMBC area along our northern boundary. Within this study area there is a Scheduled Monument and a small number of listed buildings (farmhouses) which can be identified through Historic England's list of heritage assets. It

Doncaster Council

is unlikely that their settings will be affected but the methodology to be employed as described in 11.7 of the scoping report is sufficient. There are no conservation areas or identified undesignated heritage assets within the study area that would require further consideration not identified here.

Environmental Health
No objections have been raised to the information provided within the sections relating to Environmental Health and nuisance.

Contamination
No objections have been raised to the level of information provided within the sections relating to land contamination and stability.

If you require anything further or have any questions regarding the above, please get in contact (contact details above).

From:	[redacted]
To:	DraxBECCS
Subject:	EN010120-000019-210119 - Scoping Consultation
Date:	04 February 2021 13:05:36
Attachments:	image003.jpg

Dear Ms Down

Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) – Regulations 10 and 11
Application by Drax Power Limited (the Applicant) for an Order granting Development Consent for the Drax Bioenergy with Carbon Capture and Storage Project (the Proposed Development)
Scoping consultation and notification of the Applicant's contact details and duty to make available information to the Applicant if requested

Thank you for your letter of 19 January 2021 relating to the above. I can confirm that Durham County Council has no comments to make in relation to this consultation.

I trust this is of assistance.

Yours sincerely

Chris Shields
Senior Planning Officer | Strategic Planning Team | Durham County Council | County Hall | Durham | DH1 5UL
Tel. [redacted]

Alison Down
The Planning Inspectorate
Room 3/21
Temple Quay House (2 The Square)
Temple Quay
Bristol
Avon
BS1 6PN

Our ref: RA/2021/142654/01-L01
Your ref: EN010120

Date: 16 February 2021

Dear Alison Down

Proposal: DRAX BIOENERGY WITH CARBON CAPTURE AND STORAGE PROJECT
Location: DRAX POWER STATION, SELBY, NORTH YORKSHIRE, YO8 8PH

Thank you for your consultation regarding the above proposal which was received on 19 January 2021.

We have reviewed the on the submitted Scoping Report by WSP UK Ltd, reference: EN010120 revision 01, dated January 2021. Our detailed comments are as follows and are set out under the relevant Scoping Report sections and consider the topics within our remit.

3. EIA METHODOLOGY

3.11.4 Biodiversity Net Gain Assessment

We strongly support the decision to undertake a Biodiversity Net Gain (BNG) assessment as part of the development. Though at present the scoping report commits to a BNG assessment but does not make reference to a specific BNG target, or a commitment to achieving a measurable net gain value. In line with industry best practice and the upcoming proposed Environment Bill, we recommend that the DEFRA Biodiversity Metric 2.0 is used to quantify net gains or losses in biodiversity units, with the overall aim of achieving at least 10% BNG in all habitat types present.

3.11.5 Water Framework Directive (WFD) Screening Report

We strongly support the WFD screening report proposed.

3.11.6 Flood Risk Assessment

We note and support the proposed production of a Flood Risk Assessment (FRA) for this site. The FRA should be appropriate to the nature and scale of the proposed development. In line with previous FRA's for this site it should assess the impacts of breach and overtopping events on the proposal. As well as demonstrating that the development will be safe, it should also ensure that the proposed development does not increase or exacerbate flood risk to others.

The FRA should utilise the most up to date data available and will also need to take into account the latest climate change guidance (link below):
https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances

9. ECOLOGY

9.5 Design, Mitigation and Enhancement Measures
Section 9.5.2 of the Scoping Report states that ecological enhancements will be considered through detailed design, and that there may be potential for some on-site habitat creation. Whilst we fully support the provision of enhancement measures within the development boundary, this is likely to be limited in scope and scale, and we would urge the applicant to investigate the potential for off-site enhancement at the earliest opportunity.

Policy SP18 of the adopted Selby Local Plan (2013) requires developers to seek to produce a net gain in biodiversity. We would also note that the proposed Selby Preferred Options Local Plan, Policy NE5, goes further and requires a minimum 10% biodiversity net gain. In pre-application talks with the White Rose CCS project at Drax, the need to demonstrate net gain was discussed at length. This led to an agreement for significant investment in two local nature reserves as part of the development. It would be beneficial if the applicants would confirm that a similar level of enhancement is planned through the current project commensurate with the scale of the development.

9.7 Proposed Assessment Methodology
We strongly support the decision to undertake a Biodiversity Net Gain (BNG) assessment as part of the development. In line with industry best practice and the upcoming proposed Environment Bill, we recommend that the DEFRA Biodiversity Metric 2.0 is used to quantify net gains or losses in biodiversity units, with the overall aim of achieving at least 10% BNG in all habitat types present.

As well as a module for area-based biodiversity units, the Biodiversity Metric 2.0 also includes two distinct supplementary modules for linear habitats (A: hedgerows and lines of trees & B: rivers and streams). When reporting biodiversity gains or losses using the metric, the different biodiversity unit types must be reported separately and not be summed to give an overall biodiversity unit value. Based on the information provided, the development red line boundary encompasses area-based and linear-based habitats, including rivers and streams, and so there is a possibility that these habitats will be impacted by the development. As such, we recommend that the BNG assessment should quantify the impacts to each of the three biodiversity unit types (area-based habitats, hedgerows & trees (linear) and rivers & streams (linear)) present and independently demonstrate at least 10% BNG in each.

In order to accurately quantify and report biodiversity unit value gains or losses, specific baseline surveys and habitat condition assessments will need to be

Cont/d..

undertaken to establish a pre-development reference condition for each biodiversity (habitat) unit type. The EIA process encourages the identification of avoidance or mitigation measures early in any project life cycle, so that they can be presented as part of the scoping stage. In order to embed BNG at the start of the project, we recommend that this scoping report highlights the baseline surveys that will be required for the BNG assessment. BNG related baseline surveys should be undertaken in accordance with the 'Biodiversity Metric 2.0 auditing and accounting for biodiversity user guide'.

This reasoning is supported by the paragraph 170 of the National Planning Policy Framework guidance, which highlights that planning policies and decisions should contribute to the natural environment by "minimising impacts on and providing net gains for biodiversity".

12. GROUND CONDITIONS

We have reviewed the submitted scoping report. The following comments, made in respect of ground conditions and water resources will
To ensure that the environmental statement addresses the key environmental issues for this proposal made in respect of ground conditions and water resources, we recommend that developer should:

a) Follow the risk management framework provided in Land contamination: risk management when dealing with land affected by contamination
b) Refer to our Guiding principles for land contamination for the type of information that we require in order to assess risks to controlled waters from the site – the local authority can advise on risk to other receptors, such as human health
c) Consider using the National Quality Mark Scheme for Land Contamination Management which involves the use of competent persons to ensure that land contamination risks are appropriately managed
d) Refer to the contaminated land pages on gov.uk for more information

13. WATER ENVIRONMENT

Risk Of Flooding
Surface water drainage arrangements should be discussed and agreed with both North Yorkshire County Council and the IDB, although if the arrangements include a discharge to main river then we would wish to provide comment and agree the discharge rate.

13.5 Design, Mitigation and Enhancement Measures
It is noted that the applicant intends to discuss requirements for modelling with the Environment Agency and recommend that this is undertaken at the earliest opportunity.

The applicant should also note that the Environmental Permitting (England and Wales) Regulations 2016 require a permit to be obtained for any activities which will take place:

- on or within 8 metres of a main river (16 metres if tidal)
- on or within 8 metres of a flood defence structure or culverted main river (16 metres if tidal)
- on or within 16 metres of a sea defence
- involving quarrying or excavation within 16 metres of any main river, flood defence (including a remote defence) or culvert

Cont/d..

- in a floodplain more than 8 metres from the river bank, culvert or flood defence structure (16 metres if it's a tidal main river) and you don't already have planning permission

For further guidance please visit https://www.gov.uk/guidance/flood-risk-activities-environmental-permits or contact our National Customer Contact Centre on 03708 506 506. The applicant should not assume that a permit will automatically be forthcoming once planning permission has been granted, and we advise them to consult with us at the earliest opportunity.

Table 13.3 – Water Environment – 'Impacts Scoped in or Out of Further Assessment'
We agree that Flood Risk should be scoped in to the assessment in accordance with the scoping record in Appendix A. However, in Table 13.3 on page 185, for the impact "Flood risk to adjacent receptors and Drax Power Station" it doesn't state whether it is scoped in or out. We would expect to see this scoped in.

Pollution during Construction
We appreciate that the applicant mentions that mitigation measures will be put in place during construction (ch.13.5). We would however like to see a Construction Environmental Management Plan (CEMP) or a method statement setting out specific, appropriate measures to minimise the risk of pollution during the construction phase. Such a plan/statement should address issues such as silt pollution and oil pollution. We request that the applicant liaises with the Environment Agency during the next stages of the Proposed Project and in particular during the drafting of the environment statement or the development of the CEMP or any other pollution prevention and environment management plans.

Water Framework Directive
Given the number of waterbodies that are located within and in close proximity to the proposed project's boundary we are concerned of potential water pollution due to suspended solids and other pollutants entering controlled waters during pre-operational and operational activities. Of particular concern is the river Ouse which has a moderate ecological WFD status and is also failing to meet good chemical status.

Water Framework Directive Screening Report & Impact Assessment
We strongly support the requirement of a Water Framework Directive (WFD) screening report, to determine the potential impacts of the proposed scheme on relevant WFD water and groundwater bodies. The results of the screening report should inform the need for a further, full WFD impact assessment and any mitigation required to achieve WFD compliance. We encourage the applicant to discuss the scope of any WFD assessment with the Environment Agency.

Dredging
As part of the proposed upgrade to the Drax Jetty on the River Ouse there is a proposal for dredging. At present, details such as the extent or frequency of the activity, are unclear. Dredging has the potential to prevent the achievement of WFD objectives and could result in the deterioration of a waterbody's ecological status. The WFD requires us to consider the impact of activities such as dredging on the ecological health of rivers. Any impacts associated with the activity must be identified and where necessary avoided or mitigated as part of the proposed WFD compliance assessment.

Cont/d..

Depending on the location, dredging may damage wildlife and ecosystems. Dredging can damage a watercourse's ecology by affecting its physical habitat. It can also disrupt natural riverine processes and disconnect rivers from their floodplains negatively affecting habitats that are dependent upon seasonal flooding regimes. The impact of dredging on habitats can range from minor to severe depending upon the nature of the river and how the dredging is carried out. For example, dredging may harm fish spawning grounds and disturb river life – direct removal of certain sediments can impact on specialised species which are legally protected like River and Sea lamprey and eel. Additionally, dredging may mobilise contaminated sediments which may impact water quality and riverine species. The act of dredging can also in itself trigger sediment deposition in a channel because when a channel is enlarged the flow of water can slow leading to further sediment deposition. This in turn can result in a greater need for dredging in the future. Similarly, dredging of the channel bed can create a uniform river channel cross-section with steeper and higher river banks. Artificially deepened channels can need dredging in perpetuity because if the banks erode or collapse sediment becomes deposited in the channel, these channels also accumulate silt more frequently because they are trying to return to their pre-dredged state. Consideration of the geomorphological context of the waterbody, including an understanding of historic, present and likely future natural processes is required to understand the likely effectiveness and geomorphological / ecological impacts of dredging.

Based on the above, we must stress the importance of understanding the environmental and ecological impacts associated with the proposed dredging as part of the development. In the first instance, we recommend that alternatives to dredging are explored. If dredging is deemed the only practicable option, the activity must be undertaken in a way which is compatible with restrictions around protected species and habitats. Dredging on the tidal River Ouse is likely to be a licensable activity and as such may require a marine licence from the Marine Management Organisation (MMO). Finally, any dredging activity must be done in a way which does not prevent the achievement of WFD waterbody objectives.

Abstraction

We would like to ask that impacts of potential abstractions from the River Ouse and groundwater on river flows and water levels, especially during dry periods are scoped in the Environmental Statement.

14. MATERIALS AND WASTE

Where a development involves any significant construction or related activities, we would recommend using a management and reporting system to minimise and track the fate of construction wastes, such as that set out in PAS402: 2013, or an appropriate equivalent assurance methodology. This should ensure that any waste contractors employed are suitably responsible in ensuring waste only goes to legitimate destinations.

Chapter 14 of this study relates to the assessment and possible impacts from the management of the waste arisings from this proposed development. It is noted that the study states that use will be made of the Materials Management Plan methodology within the CL:AIRE code of practice for any excavated material arisings. This is the Industry and Regulator recommended best practice approach.

ADDITIONAL COMMENTS

Environmental permitting.
This development will require a variation to the existing Environmental Permit, EPR/VP3530LS for Drax Power Station, under the Environmental Permitting (England and Wales) Regulations 2016 issued by Environment Agency. The applicant has received initial pre-application advice from the Environment Agency regarding this.

Under the Environmental Permitting (England and Wales) Regulations 2016, permitted sites should not cause harm to human health or pollution of the environment. The operator is required to have appropriate measures in place to prevent pollution to the environment, harm to human health or the quality of the environment, detriment to surrounding amenity, offence to a human sense or damage to material property. If measures are not included within the application then it is likely that we would reject any application received for an Environmental Permit under the Environmental Permitting (England and Wales) Regulations 2016.

Post combustion carbon capture (PCC) plants utilising an amine process is recognised as an 'emerging technique' for CO_2 capture processes in the Large Combustion Plant Best Available Techniques (BAT) reference document for Large Combustion Plants (2017). Under Article 14(6) of the Industrial Emissions Directive, the Environment Agency will issue BAT guidance, in consultation with industry, for both new plants and in retrofitting PCC to existing power generation plant. As a retrofit to an existing power generating activity the environmental permit variation application will be assessed against this BAT guidance. For emissions to air, the operator will need to complete an air emissions risk assessment and compare the impact of any emissions to the environmental standards provided in the following guidance: Air emissions risk assessment for your environmental permit - GOV.UK (www.gov.uk)

The Environmental Permit will control the following activities and emissions from the Installation:-

- Process efficiency including energy, water, raw materials and waste;
- Processes and emissions monitoring
- Solvent selection
- Emissions to air. Emissions will be monitored continuously via Monitoring Certification (MCERTs) approved units, where available, and by periodic extractive sampling to specified standards. The air impact assessment must take into effect in-combination affects from other industrial sources of ambient pollutants. Careful consideration needs to be given to the impact on local sensitive receptors including the designated RAMSAR sites within 10km of the installation.
- Emissions to air from PCC introduce additional pollutants to flue gasses than would otherwise be expected from biomass combustion namely amine solvent degradation products, which, through atmospheric process will include carcinogenic nitramines and nitrosamines. Monitoring of solvent quality as a measure to minimise degradation will be a permit requirement as will the requirement for solvent composition in any permit application so as to understand likely emissions.
- Emissions to water.
- Noise and vibration. It is noted that there are a number of local sensitive receptors that could potentially be affected by adverse noise and vibration.
- Unplanned emissions to the environment.

Cont/d..

- Odour control.
- Groundwater and land contamination. The Site Condition Report (SCR) will introduce a system to continually monitor the potential for pollution from the 'baseline' in order to demonstrate that there has been no impact through the life of the facility;
- Consumable (chemical) materials storage & handling;
- Process waste including its storage, handling and movement.

The Environmental Permit application must demonstrate that people and the environment will be protected from these activities and emissions. Mitigation is likely to be required to control:

- Emissions to air;
- Emissions to water;
- Noise and vibration;
- Consumable materials storage and handling.
- Waste storage and handling.

Under the Environmental Permitting regime we will be including the following key areas of potential harm when making an assessment for the Permit:

- Management – including energy efficiency and avoidance, recovery and disposal of wastes.
- Operations including consumable materials and waste storage & handling.
- Emissions and monitoring including point source emissions to water, point source emissions to air, fugitive emissions and monitoring.

Yours sincerely

Mrs Frances Edwards
Sustainable Places Planning Advisor

Direct dial [redacted]
Direct e-mail [redacted]@environment-agency.gov.uk
SP Team e-mail: sp-yorkshire@environment-agency.gov.uk

End

Forestry Commission

Yorkshire and North East Area
Foss House, King's Pool
1-2 Peasholme Green
York
YO1 7PX

Tel 0300 067 4900

yne@forestrycommission.gov.uk

Area Director
Crispin Thorn

By email only

Dear Mr. Ben Jenkinson,

16th February 2021

Reference:

Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) – Regulations 10 and 11

Application by Drax Power Limited for an Order granting Development Consent for the Drax Bioenergy with Carbon Capture and Storage Project.

Thank you for seeking the Forestry Commission's comments on the above proposed development.

The Forestry Commission is the Government experts on forestry & woodland and a statutory consultee (as defined by Schedule 1 of The Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009)[1] for major infrastructure (Nationally Significant Infrastructure Projects (NSIPS) that are likely to affect the protection or expansion of forests and woodlands (Planning Act 2008).

The Forestry Commission's responsibility is to discharge its consultee roles as efficiently, effectively and professionally as possible, based on the forestry principles set out in the UK Forestry Standard (4th edition published 2017). **Page 23** "Areas of woodland are material considerations in the planning process and may be protected in local authority Area Plans. These plans pay particular attention to woods listed on the

[1] http://www.legislation.gov.uk/uksi/2009/2264/contents/made

Ancient Woodland Inventory and areas identified as Sites of Local Nature Conservation Importance (SLNCIs).

As highlighted in the National Planning Policy Framework: *Irreplaceable habitats including ancient woodland and veteran trees* section of the National Policy Statement National Networks (NPSNN): National Planning Policy Framework (published 19th June 2019).

Paragraph 175 – "*development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists*".

The Forestry Commission has also prepared joint standing advice with Natural England on ancient woodland and veteran trees which we refer you to as it notes that ancient woodland is an irreplaceable habitat, and that, in planning decisions, Plantations on Ancient Woodland Sites (PAWS) should be treated equally in terms of the protection afforded to ancient woodland. It highlights the Ancient Woodland Inventory as a way to find out if woodland is ancient.

If you need to know more about the Forestry Commission's role in the planning system please see : https://www.gov.uk/guidance/planning-applications-affecting-trees-and-woodland#felling-trees-on-development-sites

As indicated in figure 2.1 Environmental Constraints plan there would appear to be some woodlands in the proposed development site that could be affected by the proposed development. I have commented on these woodlands in relation to the previous application in 2018 for the Drax Repower proposal. I therefore refer you to my previous comments which are attached to the email.

In relation to any tree planting or woodland creation as part of mitigation or biodiversity enhancement for the proposed development we recommend that this is carried out in accordance with the UK Forestry Standard . It is noted that there are scheduled monuments within the proposed development site boundary so therefore we recommend that any planting or management of woodlands is in accordance with the Historic Environment section of the UK Forestry Standard. There may also be opportunities to look at woodland creation to potentially improve flood risk particularly with the land to the south of the River Ouse.

The Forestry Commission would strongly encourage the applicant to consider climate change when developing their proposed development. The predicted changes in temperature along with introduced plant pests and diseases mean that we there is a need to create and manage woodlands that are more resilient to these threats.

Woodland adaption for resilience can be achieved through.

- Planting a wider range of tree species
- Using seed from a wider range of origins and provenances, including planting native trees outside their natural range.
- Encouraging natural regeneration where it is likely to be successful, to encourage evolutionary adaptation and as the climate changes
- Protecting from damaging animals

Further information can be found in the Forestry Commissions guide to Responding to the climate emergency with new trees and woodlands.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/892714/Responding_to_the_climate_emergency_with_new_trees_and_woodlands.pdf

If you require clarification on the above, please contact us via the details above.

Kind regards,

Jim Smith
Local Partnership Advisor
Forestry Commission
Yorkshire & North East Area Team

Yorkshire & North East
Foss House
Kings Pool
1-2 Peasholme Green
York
YO1 7PX

Tel 0300 067 4900

yorkshirenortheast@forestry.gsi.gov.uk
Area Director
Crispin Thorn

Date: 29th August 2018
Our ref: YNE/AUG/I&R/Statutory/2018
Your ref:

Michele Gregory
Case Manager
Planning Inspectorate
National Infrastructure
Temple Quay House
2 The Square
Bristol, BS1 6PN

BY EMAIL ONLY

Dear Michele Gregory,

Planning Act 2008 (as amended) and The Infrastructure Planning (Examination Procedure) Rules 2010 (as amended) – Rule 3

Application by Drax Power Ltd for an Order Granting Development Consent for the Drax Re-power Project

Location: Drax Power Station

Thank you for seeking our advice in your consultation for the above dated 26th June 2018.

The Forestry Commission is the Government experts on forestry & woodland and a statutory consultee (as defined by Schedule 1 of The Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009)[1] for major infrastructure (Nationally Significant Infrastructure Projects (NSIPS)) that are likely to affect the protection or expansion of forests and woodlands (Planning Act 2008).

The Forestry Commission's responsibility is to discharge its consultee roles as efficiently, effectively and professionally as possible, based on the forestry principles set out in The UK

[1] http://www.legislation.gov.uk/uksi/2009/2264/contents/made

Forestry Standard (4th edition published 2017). **Page 23** Areas of woodland are material considerations in the planning process and may be protected in local authority Area Plans. These plans pay particular attention to woods listed on the Ancient Woodland Inventory and areas identified as Sites of Local Nature Conservation Importance (SLNCIs).

The Forestry Commission has prepared joint standing advice with Natural England on ancient woodland and veteran trees which we refer you to as it notes that ancient woodland is an irreplaceable habitat, and that, in planning decisions, Plantations on Ancient Woodland Sites (PAWS) should be treated equally in terms of the protection afforded to ancient woodland. It highlights the Ancient Woodland Inventory as a way to find out if woodland is ancient.

We have reviewed Sections 1.7 (Landscape and Habitat Reinstatement and Enhancement) and 1.8 (Indicative Measures for the effective Management of the Proposed Enhancements) of the Outline Landscape and Biodiversity Strategy and generally support the proposals put forward, subject to the following considerations and in line the Government's ambition for Woodland Creation and increasing Woodland cover in England.

We recognise the purpose for the proposed Strategy to mitigate the effects of the Proposed Scheme on landscape and biodiversity features and enhance the value of such relevant features in accordance with relevant national and local planning policies. The Forestry Commission would recommend that these Landscape and Habitat Reinstatements are in accordance to the The UK Forestry Standard (4th edition published 2017).

To meet the Government's objective to improve woodlands' resilience to climate change and contribute to climate change adaptation, along with addressing climate change as part of the new requirements outlined in Part 2c, Regulation 14 of Infrastructure Planning (Environmental Impact Assessment) Regulations (2017), it is important that the applicant includes at least "a description of any features of the proposed development, or measures envisaged in order to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment".[1]

As recognised in the European Commission Guidance on Integrating Climate Change and Biodiversity into Environmental Impact Assessment, "climate change and biodiversity are generally complex issues with long-term impacts and consequences. EIAs that aim to properly address biodiversity and climate should take this into account and assess the combined impact of any number of different effects. This requires an understanding of evolving baseline trends and an assessment of the cumulative effects of the project on the changing baseline."[2]

To meet these requirements, the Forestry Commission would like to reiterate the importance of all woodlands in making our rural and urban landscapes more resilient to the effects of climate change and contribution to wider climate change adaptation. Consideration for how sustainable woodland creation and management of England's Woodlands can be secured is utilised within this proposed development will secure the role that woodlands have in reducing greenhouse emissions, carbon sequestration and contributing towards moving to a low carbon economy. We also suggest that a Forestry Commission template management plan: Create a woodland management plan - GOV.UK would be recommended, to ensure long term viability of created habitat and existing woodland in the proposed boundary for this consultation and the land in current ownership / management / influence of the DRAX power station.

The Forestry Commission would also highlight the future resilience of the proposed planting particularly in relation to current Tree Health issues in Yorkshire and across the UK such as:

[1] http://www.legislation.gov.uk/uksi/2017/572/regulation/14/made

[redacted]

Chalara dieback of ash - tree pests and diseases . We recognise that there is mention to planting species to be added / substituted when considering replacements for Ash (Fraxinus excelsior) we would highlight the current plant health order for Ash : The Plant Health (Forestry) (Amendment) Order 2012 and recommend using the Ecological Site Classification Decision Support System (ESC-DSS) - Forest Research to determine resilient species choice for the proposed tree planting palette.

We would encourage the design of the associate infrastructure (green space, woodlands, public footpaths and cycleways) to build on existing network of green infrastructure linking settlements around the DRAX power station to the adjacent countryside. When combined with an assessment of the impacts on health & wellbeing, this will aid the promotion for local residents to access the countryside.

We would direct the applicant to the attached appendices which describe relevant government policy in relation to ancient woodlands, and environment considerations in energy and infrastructure policies.

If you wish to consult us further in relation to the Outline Landscape and Biodiversity Strategy with the Forestry Commission please contact the Yorkshire and North East Office at the above address.

Yours sincerely

Jim Smith
Local Partnership Adviser

Appendix 1: A summary of Government policy on woodland

Natural Environment and Rural Communities Act 2006 (published October 2006).
Section 40 – "Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity".

National Planning Policy Framework (published July 2018).
Paragraph 175 – "*development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists*".

National Planning Practice Guidance – Natural Environment Guidance. (published March 2014)
This Guidance supports the implementation and interpretation of the National Planning Policy Framework. This section outlines the Forestry Commission's role as a non statutory consultee on *"development proposals that contain or are likely to affect Ancient Semi-Natural woodlands or Plantations on Ancient Woodlands Sites (PAWS) (as defined and recorded in Natural England's Ancient Woodland Inventory), including proposals where any part of the development site is within 500 metres of an ancient semi-natural woodland or ancient replanted woodland, and where the development would involve erecting new buildings, or extending the footprint of existing buildings"*

It also notes that ancient woodland is an irreplaceable habitat, and that, in planning decisions, **Plantations on Ancient Woodland Sites (PAWS) should be treated equally in terms of the protection afforded to ancient woodland in the National Planning Policy Framework**. It highlights the Ancient Woodland Inventory as a way to find out if a woodland is ancient.

The UK Forestry Standard (4th edition published August 2017).
Page 23: "Areas of woodland are material considerations in the planning process and may be protected in local authority Area Plans. These plans pay particular attention to woods listed on the Ancient Woodland Inventory and areas identified as Sites of Local Nature Conservation Importance SLNCIs)".

Keepers of Time – A Statement of Policy for England's Ancient and Native Woodland (published June 2005).
Page 10 "The existing area of ancient woodland should be maintained and there should be a net increase in the area of native woodland".

Natural Environment White Paper "The Natural Choice" (published June 2011)
Paragraph 2.53 - This has a "renewed commitment to conserving and restoring ancient woodlands".
Paragraph 2.56 – "The Government is committed to providing appropriate protection to ancient woodlands and to more restoration of plantations on ancient woodland sites".

Forestry Commission England

Standing Advice for Ancient Woodland and Veteran Trees (first published October 2014, revised November 2017)
This advice, issued jointly by Natural England and the Forestry Commission, is a material consideration for planning decisions across England. It explains the definition of ancient woodland, its importance, ways to identify it and the policies that are relevant to it.

The Standing Advice refers to an Assessment Guide. This guide sets out a series of questions to help planners assess the impact of the proposed development on the ancient woodland. Summaries of some Case Decisions are also available that demonstrate how certain previous planning decisions have taken planning policy into account when considering the impact of proposed developments on ancient woodland.

Biodiversity 2020: a strategy for England's wildlife and ecosystem services (published August 2011).
Paragraph 2.16 - Further commitments to protect ancient woodland and to continue restoration of Plantations on Ancient Woodland Sites (PAWS).

Appendix 2: Overarching National Policy Statement for Energy (EN-1)

Part 1 Introduction

1.1.2 The Planning Act 2008 also requires that the IPC must decide an application for energy infrastructure in accordance with the relevant NPSs except to the extent it is satisfied that to do so would:
- lead to the UK being in breach of its international obligations;
- be in breach of any statutory duty that applies to the IPC;
- be unlawful;
- result in adverse impacts from the development outweighing the benefits; or
- be contrary to regulations about how its decisions are to be taken.

1.4.2 The Planning Act 2008 sets out the thresholds for nationally significant infrastructure projects (NSIPs) in the energy sector. The Act empowers the IPC to examine applications and make decisions on the following nationally significant energy infrastructure projects:
- large gas reception and liquefied natural gas (LNG) facilities and underground gas storage facilities (meeting the thresholds set out in the Planning Act 2008, and explained in detail in Section 1.7 of the gas supply infrastructure and gas and oil pipelines NPS (EN-4)). For this infrastructure EN-1 in conjunction with EN-4 will be the primary basis for IPC decision making.

Part 5 Generic Impacts

5.3.14 Ancient woodland is a valuable biodiversity resource both for its diversity of species and for its longevity as woodland. Once lost it cannot be recreated. The IPC should not grant development consent for any development that would result in its loss or deterioration unless the benefits (including need) of the development, in that location outweigh the loss of the woodland habitat. Aged or 'veteran' trees found outside ancient woodland are also particularly valuable for biodiversity and their loss should be avoided.

Where such trees would be affected by development proposals the applicant should set out proposals for their conservation or, where their loss is unavoidable, the reasons why.

5.3.18 The applicant should include appropriate mitigation measures as an integral part of the proposed development. In particular, the applicant should demonstrate that:

- during construction, they will seek to ensure that activities will be confined to the minimum areas required for the works;
- during construction and operation best practice will be followed to ensure that risk of disturbance or damage to species or habitats is minimised, including as a consequence of transport access arrangements;
- habitats will, where practicable, be restored after construction works have finished; and
- opportunities will be taken to enhance existing habitats and, where practicable, to create new habitats of value within the site landscaping proposals.

Appendix 3: National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4)

Part 2 Assessment and Technology-Specific Information

2.21.6 In circumstances where the habitat to be crossed contains ancient woodland, trees subject to a Tree Preservation Order, or hedgerows subject to the Hedgerows Regulations 1997, the applicant should consider whether it would be feasible to use horizontal direct drilling under the ancient woodland or thrust bore under the protected tree or hedgerow and the IPC should consider requiring this, where not included in the proposal.

Appendix 4: other relevant policies and documents

The Clean Growth Strategy: Leading the way to a low carbon future[3] (Updated April 2018)
Page 107: What is natural capital? "Natural capital enables us to think about our natural environment and the countryside as a set of valuable assets (for example, forests, clean air, soils, species, freshwaters, oceans and minerals). Like any asset, natural capital, if maintained and invested in, provides flows of services to the economy and society. These include food, energy, carbon sequestration, pollutant removal, flood risk reduction, recreational and educational opportunities, health benefits and many others."
Paragraph 7: "During the 2020s we need to accelerate the rate of tree planting, working towards our 12 per cent tree cover aspiration by 2060. … Recently published natural capital accounts by the Office for National Statistics show that Britain's woodlands provide services of £2.3 billion per year to the economy in terms of recreation, carbon sequestration, timber and air pollutant removal."

A Green Future: Our 25 Year Plan to Improve the Environment[4] (Updated February 2018)
Foreword from the Prime Minister: "Our natural environment is our most precious inheritance. The United Kingdom is blessed with a wonderful variety of natural landscapes and

[3] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/700496/clean-growth-strategy-correction-april-2018.pdf
[4] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf

habitats and our 25 Year Environment Plan sets out our comprehensive and long-term approach to protecting and enhancing them in England for the next generation. … By using our land more sustainably and creating new habitats for wildlife, including by planting more trees, we can arrest the decline in native species and improve our biodiversity."
Foreword from the Secretary of State: "Respecting nature's intrinsic value, and the value of all life, is critical to our mission. For this reason we safeguard cherished landscapes from economic exploitation, protect the welfare of sentient animals and strive to preserve endangered woodland and plant life, not to mention the greening of our urban environments. … We need to replenish depleted soil, plant trees, support wetlands and peatlands, rid seas and rivers of rubbish, reduce greenhouse gas emissions, cleanse the air of pollutants, develop cleaner, sustainable energy and protect threatened species and habitats."
Page 19: "The value of natural capital is routinely understated. If we look at England's woods and forests, for example, as a national asset, using a natural capital approach, the value of the services they deliver is an estimated £2.3bn. Of this sizeable sum, according to a recent study, only a small proportion – 10% – is in timber values. The rest derives from other benefits provided to society, such as human recreation and carbon sequestration – the process by which trees lock-up and store carbon from the atmosphere."
Page 47: "We will increase tree planting by creating new forests, and incentivising extra planting on private and the least productive agricultural land, where appropriate. This will support our ambition to plant 11m trees. … We will not focus solely on planting, however; we will also support increased protection of existing trees and forests. … Beyond the economic benefits, the Government recognises the significant heritage value and irreplaceable character of ancient woodland and veteran trees. We are committed to ensuring stronger protection of our ancient woodlands, making sure they are sustainably managed to provide a wide range of social, environmental, societal and economic benefits."

Industrial Strategy White Paper "Building a Britain fit for the future"[5] (Published November 2017)
Page 43: "We also want everyone to feel the benefits of clean growth, so we will work to create a future where our cities benefit from cleaner air, our businesses from enhanced resource security and our countryside from regenerated natural capital."
Page 135: "We will work not just to preserve, but to enhance our natural capital – the air, water, soil and ecosystems that support all forms of life – since this is an essential basis for economic growth and productivity over the long term."
Page 148: "We are committed to moving towards a more circular economy – to raising productivity by using resources more efficiently, to increasing resilience by contributing to a healthier environment, and to supporting long-term growth by regenerating our natural capital."

BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations[6] (published April 2012)
Trees are important elements of green infrastructure, contributing to urban cooling through evapotranspiration and providing micro-climatic effects that can reduce energy demands in buildings. They therefore represent a key resource that can significantly contribute to climate change adaptation.

Page 10 "The existing area of ancient woodland should be maintained and there should be a net increase in the area of native woodland"

[5] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/664563/industrial-strategy-white-paper-web-ready-version.pdf

[redacted]

Health and Safety Executive

CEMHD - Land Use Planning,
NSIP Consultations,
Building 1.2,
Redgrave Court,
Merton Road,
Bootle, Merseyside
L20 7HS.

HSE email: NSIP.applications@hse.gov.uk

FAO Ben Jenkinson
The Planning Inspectorate
Temple Quay House
Temple Quay
Bristol
BS1 6PN
By email only

Dear Mr Jenkinson, 02 February 2021

PROPOSED Drax Bioenergy with Carbon Capture and Storage Project (BECCS) (the project)
PROPOSAL BY Drax Power Limited (the applicant)
INFRASTRUCTURE PLANNING (ENVIROMENTAL IMPACT ASSESSMENT) REGULATIONS 2017 (as amended) REGULATIONS 10 and 11

Thank you for your letter of the 19 January 2021 regarding the information to be provided in an environmental statement relating to the above project. HSE does not comment on EIA Scoping Reports but the following information is likely to be useful to the applicant.

HSE's land use planning advice

Will the proposed development fall within any of HSE's consultation distances?

According to HSE's records there are three major accident hazard sites within the proposed site boundary of the Drax Bioenergy with Carbon Capture and Storage, for this nationally significant infrastructure project.

This is based on the current configuration as illustrated in, *Figure 1.1 – Site Boundary Plan, Drawing Number: EN010121-PA-SCO-1.1-Sheet 1, Date: 12/01/2021* (P28 of EIA Scoping Report).

The major accident hazard sites are:

HSE reference H4468 operated by Drax Power Station, H4563 operated by Lytag Limited and H4586 operated by Capture Power Limited.

HSE's Land Use Planning advice would be dependent on the location of areas where people may be present. When we are consulted by the Applicant with further information under Section 42 of the Planning Act 2008, we can provide full advice

Hazardous Substance Consent

The presence of hazardous substances on, over or under land at or above set threshold quantities (Controlled Quantities) will probably require Hazardous Substances Consent (HSC) under the Planning (Hazardous Substances) Act 1990 as amended. The substances, alone or when aggregated with others for which HSC is required, and the

associated Controlled Quantities, are set out in The Planning (Hazardous Substances) Regulations 2015 as amended.

HSC would be required to store or use any of the Named Hazardous Substances or Categories of Substances at or above the controlled quantities set out in Schedule 1 of these Regulations.

Further information on HSC should be sought from the relevant Hazardous Substances Authority.

Consideration of risk assessments

Regulation 5(4) of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 requires the assessment of significant effects to include, where relevant, the expected significant effects arising from the proposed development's vulnerability to major accidents. HSE's role on NSIPs is summarised in the following Advice Note 11 Annex on the Planning Inspectorate's website - Annex G – The Health and Safety Executive . This document includes consideration of risk assessments on page 3.

Explosives sites

HSE has no comment to make as there are no licensed explosives sites in the vicinity.

Electrical Safety

No comment from a planning perspective.

During lockdown, please send any further communication on this project directly to the HSE's designated e-mail account for NSIP applications at **nsip.applications@hse.gov.uk**. We are currently unable to accept hard copies, as our offices have limited access.

Yours sincerely,

Monica

Monica Langton
CEMHD4 NSIP Consultation Team

Historic England

Ms Alison Down
The Planning Inspectorate
Environmental Services, Central Operations
Temple Quay House, 2 The Square
Bristol
BS1 6PN

Direct Dial: [redacted]

Our ref: PL00736042

28 January 2021

Dear Ms Down

Re: Drax Bioenergy with Carbon Capture and Storage Project.
Environmental Impact Scoping Assessment Report.

PINS ref: EN010120

Thank you for your letter of 19th January 2021 consulting Historic England about the above EIA Scoping Report.

While Historic England broadly welcomes measures to mitigate and adapt to the effects of climate change, we are aware that such developments have the potential to harm the significance of heritage assets and their settings. With this in mind Historic England has drawn up guidance for planners and developers on climate change and renewable energy technologies, including Wind Energy and the Historic Environment available at www.helm.org.uk.

To assist in the implementation of national planning policy Historic England has produced guidance on managing change within the settings of heritage assets. The guidance offers a framework for the consideration of setting, applicable to designated and non-designated heritage assets, and for assessing the implications of development affecting the setting of a heritage asset. It provides the principal Historic England advice on the issue of setting and should be used in conjunction with other relevant guidance. The Setting of Heritage Assets is available at www.english-heritage.org.uk/publications/setting-heritage-assets/.

Our initial review indicates that the proposed development could, potentially, have an impact upon a number of designated heritage assets and their settings in the area. In line with the National Planning Policy Framework (NPPF, paragraph 189), we would expect the Environmental Statement to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and sufficient to understand the potential impact of the proposal on their significance.
We would draw your attention, in particular, to the large number of designated heritage assets present within 10 km of the proposed scheme. They comprise:

• 20 scheduled monuments (including Drax Augustinian Priory);
• 480 listed buildings (15 Grade I listed, 18 Grade II* and 447 Grade II listed buildings); and
• 13 conservation areas.

We recommend that the applicant contact the local authority Historic Environment Record for further information on designated heritage assets, and the relevant local authority for the location of the 13 conservation areas.

We reiterate that this is not an exhaustive list and other Heritage assets may also be identified as part of the assessment process which would require appropriate consideration. In particular, we would expect the assessment to clearly demonstrate that the extent of the proposed study area is of the appropriate size to ensure that all heritage assets likely to be affected by this development have been included and can be properly assessed. Methodologies that can help to inform the extent of the study area include a Visual Impact Assessment and the production of a Zone of Theoretical Visibility (ZTV) in line with current guidance . The ZTV of the proposed development should initially be based on topographical data before the impact of existing trees and buildings etc. on lines of sight is assessed.

Given the heights of the structures associated with the proposed development and the surrounding landscape character, this development is likely to be visible across a large area and could, as a result, affect the significance of heritage assets at some distance from this site itself.

Therefore consideration should also be given to undertaking a practical exercise with either a crane or balloons erected at the height of the proposed structures so that all parties are better able to understand the landscape impact of the proposals. We have been engaged in other major developments where this technique has been used and it greatly assisted the identification of the key issues and impacts from which the resulting EIA was able to focus its assessment.

We would also expect the Environmental Statement to consider the potential impacts which the proposals might have upon those heritage assets which are not designated. The NPPF defines a heritage asset as “a building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest”. This includes designated heritage assets and assets identified by the local planning authority (including local listing). This information is available via the local authority Historic Environment Record (www.heritagegateway.org.uk) and relevant local authority staff.

We recommend that the applicant involve the Conservation Officer of Selby District Council and the archaeological staff at North Yorkshire County Council (NYCC) in the development of this assessment. They are best placed to advise on: local historic

environment issues and priorities; how the proposal can be tailored to avoid and minimise potential adverse impacts on the historic environment; the nature and design of any required mitigation measures; and opportunities for securing wider benefits for the future conservation and management of heritage assets.

In general terms, Historic England advises that a number of considerations will need to be taken into account when proposals are assessed. This includes consideration of the impact of ancillary infrastructure, such as tracks and grid connections, and the upgraded Drax jetty structure:

- The potential impact upon the historic character of the landscape, including landscape features which positively contribute to character.
- Direct impacts on heritage assets (buildings, monuments, sites, places, areas, landscapes), whether designated or not.
- Impacts on the settings of heritage assets since elements of setting can contribute to the significance of a heritage asset. An assessment of the impact on setting will be proportionate to the significance of the asset and the degree to which the proposed changes enhance or detract from its significance and the ability to appreciate the asset. In the consideration of setting a variety of views may make a contribution to significance to varying degrees. These can include long-distance views as well as the inter-visibility between heritage assets or between heritage assets and natural features. For further advice see The Setting of Heritage Assets.
- The potential for archaeological remains.
- Effects on landscape amenity from public and private land.
- The cumulative impacts of the proposal.

It is important that the assessment is designed to ensure that all impacts are fully understood. Section drawings and techniques such as photomontages are a useful part of this.

The assessment should also take account of the potential impact which associated activities (such as construction, servicing and maintenance, and associated traffic) might have upon perceptions, understanding and appreciation of the heritage assets in the area. The assessment should also consider, where appropriate, the likelihood of alterations to drainage patterns that might lead to in situ decomposition or destruction of below ground archaeological remains and deposits, and can also lead to subsidence of buildings and monuments.

Given the number of designated heritage assets within the area, we would welcome early discussions with the applicant in order to agree the key sites and setting issues which will need to be addressed within the EIA.

If you have any queries about any of the above, or would like to discuss anything further, please contact me.

37 TANNER ROW YORK YO1 6WP

Telephone 01904 601948
HistoricEngland.org.uk

Historic England

Yours sincerely,

Keith Emerick

Keith Emerick
Ancient Monuments Inspector
[redacted]@HistoricEngland.org.uk

cc: Peter Rowe, Principal Archaeologist, NYCC

Hull City Council

HULL 2017 UK City of Culture

Your Ref: EN010120-000019-210119
Our Ref:
Contact Officer: Simon Mounce
Telephone: [redacted]
Email: [redacted]@hullcc.gov.uk
Textphone: [redacted]
Date: 16th February 2021

Alison Down
EIA Advisor
on behalf of the Secretary of State
Environmental Services
Central Operations
Temple Quay House
2 The Square
Bristol BS1 6PN

Dear Alison

Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) – Regulations 10 and 11

Application by Drax Power Limited (the Applicant) for an Order granting Development Consent for the Drax Bioenergy with Carbon Capture and Storage Project (the Proposed Development)

Scoping consultation and notification of the Applicant's contact details and duty to make available information to the Applicant if requested

Thank you for consulting Hull City Council inviting comments on this scoping consultation

GENERAL COMMENT:

Hull City Council support the development of CCUS as a key element in the decarbonisation of manufacturing and industrial production in the Yorkshire and Humber Region.

TRANSPORT:

Section 6.2.6 of the report identifies the intention to use the traffic flow data collected in 2018 for the Drax Repower DCO application, as the most representative data set due to the current impacts of Covid-19. This seems reasonable in current circumstances. The study area appears to capture the main highway network and links leading to / from the Drax site. However, the scoping document does not identify the location from which the construction materials are to be sourced or disposed of, nor indeed any additional materials movements arising as a consequence of the proposals during the ensuing operational phase, and therefore this will need to be considered when finalising the network for assessment once this information is available.

Section 6.3.3 of the report identifies that any refinements to the study area will be based upon Rule '1' and Rule '2' of the Institute of Environmental Management and Assessment (IEMA) guidelines which can be used to determine the effect of increased traffic volumes on links within the study area, with consideration of increased traffic flows by more than 30% (Rule 1) and 10% (Rule 2) for particularly sensitive areas. If this methodology is to scope whether links are to be included or excluded in the assessment, consideration should be given to assessment of the operational capacity of the junctions in the study area. It may only take a small increase in flow on various arms at a junction, especially if the junction is close to capacity, to have a detrimental impact on its operation.

Section 6.5.1 (second bullet point) could provide details on the type of measures which could be included in the Construction Worker Travel Plan (CWTP), as per the first bullet point. At present there is no indication of what this document may potentially contain.

Section 6.7 identifies that it is proposed to use the same assessment methodology as applied for the Drax Repower DCO application. As this methodology has not been set out within the scoping document, Hull City Council cannot comment on its suitability.

AIR QUALITY:

As emissions to air from the process are controlled through the conditions applied by the Environment Agency in the associated Environmental Permits, there are no additional measures needed relating to the potential air quality impact of the installation within Hull City Council's boundaries. The City Council's position in this respect would need to be reconsidered in the event that the proposed development would result in additional traffic movements on the city's networks.

NOISE AND VIBRATION:

Due to the location of the site, there are no anticipated issues associated with noise or vibration that are liable to have any impact within Hull City Council boundaries. The City Council's position in this respect would need to be reconsidered in the event that the proposed development would result in additional traffic movements on the city's networks.

ECOLOGY:

The scoping report has been informed by historic and ongoing surveys and shows that the scoping document is supported by up to date and ongoing survey effort. The distance separating Hull from the proposal means that there are no likely impacts on Hull's local ecology. The Humber Estuary has been identified as a potential sensitive receptor within the scoping document and the inclusion is welcomed in terms of upstream impacts.
The scoping report shows a commitment to biodiversity net gain and the production of a construction environmental management plan.
The scoping document does not identify that in-combination effects will be explored in relation to impacts on designated site and this should be an integral part of the habitat regulations screening process.

GROUND CONDITIONS:

Due to the location of the site, there are no anticipated issues associated with ground conditions and land contamination that are liable to have any impact within Hull City Council Boundaries.

Yours sincerely

John Craig MRTPI
Head of Planning
Hull City Council
2nd Floor, Guildhall
Alfred Gelder Street
Hull
HU1 2AA

From:	Development Management
To:	DraxBECCS
Subject:	RE: EN010120 - Proposed Drax Bioenergy with Carbon Capture and Storage Project (BECCS) - EIA Scoping Notification and Consultation
Date:	20 January 2021 11:34:44
Attachments:	~WRD0001.jpg image002.png image003.png

Dear Ben,

I can confirm that Lancashire County Council have no comment to make.

Regards

Steph

Steph Bullock
Business Support Officer
Development Management
Lancashire County Council
Tel: [redacted]
Email: [redacted]@lancashire.gov.uk

From: Plant Enquiries
To: DraxBECCS
Subject: RE: EN010120 - Proposed Drax Bioenergy with Carbon Capture and Storage Project (BECCS) - EIA Scoping Notification and Consultation
Date: 22 January 2021 17:38:09
Attachments: image006.jpg
image004.png
image007.png
image008.png
image045020.jpg
image757637.png
image609097.png
image882296.png
image164213.png

Dear Sir/Madam,

Thank you for submitting your recent plant enquiry.

Based on the information provided, I can confirm that Last Mile **does not** have any plant within the area(s) specified in your request.

If you require further assistance with outstanding enquiries, please call 03300 587 443.

Please ensure all plant enquiries are sent to plantenquiries@lastmile-uk.com

Regards

Plant Enquiries

|
e: plantenquiries@lastmile-uk.com | w: www.energetics-uk.com
a: Fenick House, Lister Way, Hamilton International Technology Park, Glasgow, G72 0FT

From:	[redacted]
To:	DraxBECCS
Subject:	RE: Proposed Drax Bioenergy with Carbon Capture and Storage Project (BECCS) - EIA Scoping Notification and Consultation
Date:	27 January 2021 11:51:40
Attachments:	~WRD000.jpg image001.png image002.png

Hi Ben,

Thank you for consulting with us. I can confirm that having scanned the Scoping Report, we have no comments to make.

Kind regards

Louise White
Team Leader (Minerals & Waste Planning)
Development Management
Leeds City Council.
www.leeds.gov.uk

From:	SM-MMO-SH - MFA Marine Consents (MMO)
To:	DraxBECCS
Subject:	RE: EN010120 - Proposed Drax Bioenergy with Carbon Capture and Storage Project (BECCS) - EIA Scoping Notification and Consultation
Date:	21 January 2021 17:11:53
Attachments:	image002.png image003.png

Marine Licensing, Wildlife Licences and other permissions

Dear Sir/Madam,

Please be aware that any works within the Marine area require a licence from the Marine Management Organisation. It is down to the applicant themselves to take the necessary steps to ascertain whether their works will fall below the Mean High Water Springs mark.

Response to your consultation

The Marine Management Organisation (MMO) is a non-departmental public body responsible for the management of England's marine area on behalf of the UK government. The MMO's delivery functions are; marine planning, marine licensing, wildlife licensing and enforcement, marine protected area management, marine emergencies, fisheries management and issuing European grants.

Marine Licensing

Works activities taking place below the mean high water mark may require a marine licence in accordance with the Marine and Coastal Access Act (MCAA) 2009.

Such activities include the construction, alteration or improvement of any works, dredging, or a deposit or removal of a substance or object below the mean high water springs mark or in any tidal river to the extent of the tidal influence.

Applicants should be directed to the MMO's online portal to register for an application for marine licence

https://www.gov.uk/guidance/make-a-marine-licence-application

You can also apply to the MMO for consent under the Electricity Act 1989 (as amended) for offshore generating stations between 1 and 100 megawatts in English waters.

The MMO is also the authority responsible for processing and determining Harbour Orders in England, together with granting consent under various local Acts and orders regarding harbours.

A wildlife licence is also required for activities that that would affect a UK or European protected marine species.

The MMO is a signatory to the coastal concordat and operates in accordance with its principles. Should the activities subject to planning permission meet the above criteria then the applicant should be directed to the follow pages: check if you need a marine licence and asked to quote the following information on any resultant marine licence

application:

- local planning authority name,
- planning officer name and contact details,
- planning application reference.

Following submission of a marine licence application a case team will be in touch with the relevant planning officer to discuss next steps.

Environmental Impact Assessment

With respect to projects that require a marine licence the EIA Directive (codified in Directive 2011/92/EU) is transposed into UK law by the Marine Works (Environmental Impact Assessment) Regulations 2007 (the MWR), as amended. Before a marine licence can be granted for projects that require EIA, MMO must ensure that applications for a marine licence are compliant with the MWR.

In cases where a project requires both a marine licence and terrestrial planning permission, both the MWR and The Town and Country Planning (Environmental Impact Assessment) Regulations http://www.legislation.gov.uk/uksi/2017/571/contents/made may be applicable.

If this consultation request relates to a project capable of falling within either set of EIA regulations, then it is advised that the applicant submit a request directly to the MMO to ensure any requirements under the MWR are considered adequately at the following link

https://www.gov.uk/guidance/make-a-marine-licence-application

Marine Planning

Under the Marine and Coastal Access Act 2009 ch.4, 58, public authorities must make decisions in accordance with marine policy documents and if it takes a decision that is against these policies it must state its reasons. MMO as such are responsible for implementing the relevant Marine Plans for their area, through existing regulatory and decision-making processes.

Marine plans will inform and guide decision makers on development in marine and coastal areas. Proposals should conform with all relevant policies, taking account of economic, environmental and social considerations.

At its landward extent, a marine plan will apply up to the mean high water springs mark, which includes the tidal extent of any rivers. As marine plan boundaries extend up to the level of the mean high water spring tides mark, there will be an overlap with terrestrial plans which generally extend to the mean low water springs mark.

The East Inshore and Offshore marine plans were adopted on the 2nd April 2014. The South Inshore and Offshore marine plans were adopted on the 17th July 2018. Both plans are a statutory consideration for public authorities with decision making functions. The East Inshore and East Offshore Marine Plans cover the coast and seas from Flamborough Head to Felixstowe; the South Inshore and South Offshore Marine Plans cover the coast and seas from Folkestone to the River Dart in Devon.

From 14 January 2020 the draft North East, draft North West, draft South East,

and draft South West Marine Plans are now a material for consideration for public authorities with decision making functions. This is the final stage of statutory public consultation before the marine plans are submitted.

A map showing how England's waters have been split into 6 marine plan areas is available on our website. For further information on how to apply the marine plans please visit our Explore Marine Plans service.

Planning documents for areas with a coastal influence may wish to make reference to the MMO's licensing requirements and any relevant marine plans to ensure that necessary regulations are adhered to. All public authorities taking authorisation or enforcement decisions that affect or might affect the UK marine area must do so in accordance with the Marine and Coastal Access Act and the UK Marine Policy Statement unless relevant considerations indicate otherwise. Local authorities may also wish to refer to our online guidance and the Planning Advisory Service soundness self-assessment checklist. If you wish to contact your local marine planning officer you can find their details on our gov.uk page.

Minerals and waste plans and local aggregate assessments

If you are consulting on a mineral/waste plan or local aggregate assessment, the MMO recommend reference to marine aggregates is included and reference to be made to the documents below;

- The Marine Policy Statement (MPS), section 3.5 which highlights the importance of marine aggregates and its supply to England's (and the UK) construction industry.
- The National Planning Policy Framework (NPPF) which sets out policies for national (England) construction minerals supply.
- The Managed Aggregate Supply System (MASS) which includes specific references to the role of marine aggregates in the wider portfolio of supply.
- The National and regional guidelines for aggregates provision in England 2005-2020 predict likely aggregate demand over this period including marine supply.

The NPPF informed MASS guidance requires local mineral planning authorities to prepare Local Aggregate Assessments, these assessments have to consider the opportunities and constraints of all mineral supplies into their planning regions – including marine. This means that even land-locked counties, may have to consider the role that marine sourced supplies (delivered by rail or river) play – particularly where land based resources are becoming increasingly constrained.

If you require further guidance on the Marine Licencing process, please follow the link https://www.gov.uk/topic/planning-development/marine-licences

Ministry of Defence

Defence Infrastructure Organisation

Alison Down
The Planning Inspectorate
Temple Quay House,
2 The Square,
Temple Quay,
Bristol,
BS1 6PN

Safeguarding Department
Statutory & Offshore
Defence Infrastructure Organisation
Kingston Road
Sutton Coldfield
West Midlands
B75 7RL

Tel: [redacted]

E-mail: DIO-safeguarding-statutory@mod.gov.uk

www.mod.uk/DIO

Your reference: EN010120-000019-210119
Our reference: 10050567

15 February 2021

Dear Alison,

MOD Safeguarding- Site Outside Safeguarding Area

Proposal:	Development Consent for the Drax Bioenergy with Carbon Capture and Storage Project
Location:	Drax Power Station in Selby, North Yorkshire
Grid Ref:	466,816 429,239 466,157 427,256

Thank you for consulting Defence Infrastructure Organisation (DIO) on the above proposed development.

This application relates to a site outside of Ministry of Defence safeguarding areas. I can therefore confirm that the Ministry of Defence has no safeguarding objections to this proposal.

I trust this adequately explains our position on this matter

Yours sincerely

Kalie Jagpal
Assistant Safeguarding Manager

From:	[redacted]
To:	DraxBECCS
Subject:	EN010120 - Drax Bioenergy with Carbon Capture and Storage - EIA Scoping Notification and Consultation Response
Date:	16 February 2021 15:07:02
Attachments:	DBCC - Statutory consultation letter - email.pdf

Good afternoon,

This is a response on behalf of National Grid Electricity Transmission plc (NGET).
NGET have assets within the proposed land boundary. NGET wishes to be continued to be consulted on the matter as the development progresses

Kind Regards

Spencer Jefferies BSc AssocRTPI
Town Planner
Land Rights and Acquisitions, UK Land and Property
national**grid**

[redacted]@nationalgrid.com

National Grid House, (Floor C2), Warwick Technology Park, Gallows Hill, Warwick, CV34 6DA
nationalgrid.com | Twitter | LinkedIn

Please consider the environment before printing this email.

In order to deal with your query/request, we may need to collect your personal data. For more information on National Grid's privacy policy in respect of your personal data, please see attached link: https://www.nationalgrid.com/group/privacy-policy

Advance notice of holiday:

group please use the attached link: [redacted]

From:	[redacted]
To:	DraxBECCS
Cc:	BECCDCO@drax.com; NATS Safeguarding
Subject:	RE: EN010120 - Proposed Drax Bioenergy with Carbon Capture and Storage Project (BECCS) - EIA Scoping Notification and Consultation [SG20489]
Date:	21 January 2021 17:05:44
Attachments:	image007.png image003.png image004.png image017.png image018.png image019.png image020.png image021.png

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Dear Sirs,

NATS operates no infrastructure within 20km of the site and anticipates no impact from the proposal. Accordingly it has no comments to make on the Scoping Opinion/Environmental Statement.

Regards
S. Rossi
NATS Safeguarding Office

Sacha Rossi
ATC Systems Safeguarding Engineer

D: [redacted]

E: [redacted]@nats.co.uk

4000 Parkway, Whiteley,
Fareham, Hants PO15 7FL
[redacted]

Date: 27 January 2021
Our ref: 340709
Your ref: EN010120

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

T 0300 060 3900

Mr. Ben Jenkinson
Temple Quay House
2 The Square
Bristol
BS1 6PN
BY EMAIL ONLY

Dear Mr. Ben Jenkinson

Environmental Impact Assessment Scoping consultation (Regulations 10 and 11 of The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations): Proposed Drax Bioenergy with Carbon Capture and Storage Project (BECCS)
Location: Drax Power Station, North Yorkshire

Thank you for seeking our advice on the scope of the Environmental Statement (ES) in your consultation dated 19 January 2021**.**

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.

Case law[1] and guidance[2] has stressed the need for a full set of environmental information to be available for consideration prior to a decision being taken on whether or not to grant planning permission. Annex A to this letter provides Natural England's advice on the scope of the Environmental Impact Assessment (EIA) for this development.

Should the proposal be amended in a way which significantly affects its impact on the natural environment then, in accordance with Part 4 of the Natural Environment and Rural Communities Act 2006, Natural England should be consulted again.

We would be happy to comment further should the need arise but if in the meantime you have any queries, please do not hesitate to contact us. For any queries relating to the specific advice in this letter please contact Hannah Gooch at [redacted]@naturalengland.org.uk or [redacted]. For any new consultations, or to provide further information on this consultation please send your correspondence to consultations@naturalengland.org.uk.

Yours sincerely

Hannah Gooch
Yorkshire and Northern Lincolnshire Area Team
Natural England

[1] Harrison, J in *R. v. Cornwall County Council ex parte Hardy* (2001)
[2] *Note on Environmental Impact Assessment Directive for Local Planning* Authorities Office of the Deputy Prime Minister (April 2004) available from http://webarchive.nationalarchives.gov.uk/+/http://www.communities.gov.uk/planningandbuilding/planning/sustainabilityenvironmental/environmentalimpactassessment/noteenvironmental/

Annex A – Advice related to EIA Scoping Requirements

1. General Principles

Schedule 4 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017, sets out the necessary information to assess impacts on the natural environment to be included in an ES, specifically:

- A description of the development – including physical characteristics and the full land use requirements of the site during construction and operational phases.
- Expected residues and emissions (water, air and soil pollution, noise, vibration, light, heat, radiation, etc.) resulting from the operation of the proposed development.
- An assessment of alternatives and clear reasoning as to why the preferred option has been chosen.
- A description of the aspects of the environment likely to be significantly affected by the development, including, in particular, population, fauna, flora, soil, water, air, climatic factors, material assets, including the architectural and archaeological heritage, landscape and the interrelationship between the above factors.
- A description of the likely significant effects of the development on the environment – this should cover direct effects but also any indirect, secondary, cumulative, short, medium and long term, permanent and temporary, positive and negative effects. Effects should relate to the existence of the development, the use of natural resources and the emissions from pollutants. This should also include a description of the forecasting methods to predict the likely effects on the environment.
- A description of the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment.
- A non-technical summary of the information.
- An indication of any difficulties (technical deficiencies or lack of know-how) encountered by the applicant in compiling the required information.

It will be important for any assessment to consider the potential cumulative effects of this proposal, including all supporting infrastructure, with other similar proposals and a thorough assessment of the 'in combination' effects of the proposed development with any existing developments and current applications. A full consideration of the implications of the whole scheme should be included in the ES. All supporting infrastructure should be included within the assessment.

2. Biodiversity and Geology

2.1 Ecological Aspects of an Environmental Statement

Natural England advises that the potential impact of the proposal upon features of nature conservation interest and opportunities for habitat creation/enhancement should be included within this assessment in accordance with appropriate guidance on such matters. Guidelines for Ecological Impact Assessment (EcIA) have been developed by the Chartered Institute of Ecology and Environmental Management (CIEEM) and are available on their website.

EcIA is the process of identifying, quantifying and evaluating the potential impacts of defined actions on ecosystems or their components. EcIA may be carried out as part of the EIA process or to support other forms of environmental assessment or appraisal.

2.2 Internationally and Nationally Designated Sites

The ES should thoroughly assess the potential for the proposal to affect designated sites. European sites (e.g. designated Special Areas of Conservation and Special Protection Areas) fall within the scope of the Conservation of Habitats and Species Regulations 2017 (as amended). In addition paragraph 176 of the National Planning Policy Framework requires that potential Special Protection Areas, possible Special Areas of Conservation, listed or proposed Ramsar sites, and any site identified as being necessary to compensate for adverse impacts on classified, potential or possible SPAs, SACs and Ramsar sites be treated in the same way as classified sites.

Under Regulation 63 of the Conservation of Habitats and Species Regulations 2017 (as amended) an appropriate assessment needs to be undertaken in respect of any plan or project which is (a) likely to have a significant effect on a European site (either alone or in combination with other plans or projects) and (b) not directly connected with or necessary to the management of the site.

Should a Likely Significant Effect on a European/Internationally designated site be identified or be uncertain, the competent authority may need to prepare an Appropriate Assessment, in addition to consideration of impacts through the EIA process.

Sites of Special Scientific Interest (SSSIs) and sites of European or international importance (Special Areas of Conservation, Special Protection Areas and Ramsar sites)
The development site is in close proximity to the following designated nature conservation site(s):

- River Derwent SAC
- River Derwent SSSI

In addition, we note that there are a number of other designated sites within the 15km search radius, which will need to be included in the air quality assessments.

Natural England also notes that the proposed jetty improvement works are upstream of the Humber Estuary SAC, Ramsar and SSSI, and therefore potential impacts on lamprey migration routes should be considered.

Further information on the SSSIs and their special interest features can be found at www.magic.gov.uk. The Environmental Statement should include a full assessment of the direct and indirect effects of the development on the features of special interest within the nearby SPA, SAC, Ramsar and SSSI sites and should identify such mitigation measures as may be required in order to avoid, minimise or reduce any adverse significant effects.

European site conservation objectives are available at http://publications.naturalengland.org.uk/category/6490068894089216.

2.3 Regionally and Locally Important Sites
The EIA will need to consider any impacts upon local wildlife and geological sites. Local Sites are identified by the local wildlife trust, geoconservation group or a local forum established for the purposes of identifying and selecting local sites. They are of county importance for wildlife or geodiversity. The Environmental Statement should therefore include an assessment of the likely impacts on the wildlife and geodiversity interests of such sites. The assessment should include proposals for mitigation of any impacts and if appropriate, compensation measures. Contact the local wildlife trust, geoconservation group or local sites body in this area for further information.

2.4 Protected Species - Species protected by the Wildlife and Countryside Act 1981 (as amended) and by the Conservation of Habitats and Species Regulations 2017 (as amended)
The ES should assess the impact of all phases of the proposal on protected species (including, for example, great crested newts, reptiles, birds, water voles, badgers and bats).

Natural England does not hold information on the location of significant populations of protected species, but advises on the procedures and legislation relevant to such species. You must provide sufficient information for the Examining authority/ Secretary of State to assess whether protected species are likely to be effected and, if so, whether appropriate avoidance, mitigation, avoidance or compensation measures can be put in place. Further information is included in Natural England's standing advice on protected species and in Advice Note 11 Annex C Natural England.

Records of protected species should be sought from appropriate local biological record centres, nature conservation organisations, groups and individuals; and consideration should be given to the wider context of the site for example in terms of habitat linkages and protected species populations in the wider area, to assist in the impact assessment.

The conservation of species protected by law is explained in Part IV and Annex A of Government Circular 06/2005 *Biodiversity and Geological Conservation: Statutory Obligations and their Impact within the Planning System*. The area likely to be affected by the proposal should be thoroughly surveyed by competent ecologists at appropriate times of year for relevant species and the survey results, impact assessments and appropriate accompanying mitigation strategies included as part of the ES.

2.5 Habitats and Species of Principal Importance

The ES should thoroughly assess the impact of the proposals on habitats and/or species listed as 'Habitats and Species of Principal Importance' within the England Biodiversity List, published under the requirements of S41 of the Natural Environment and Rural Communities (NERC) Act 2006. Section 40 of the NERC Act 2006 places a general duty on all public authorities, to conserve and enhance biodiversity. Further information on this duty is available here https://www.gov.uk/guidance/biodiversity-duty-public-authority-duty-to-have-regard-to-conserving-biodiversity.

Government Circular 06/2005 states that Biodiversity Action Plan (BAP) species and habitats, 'are capable of being a material consideration…in the making of planning decisions'. Natural England therefore advises that survey, impact assessment and mitigation proposals for Habitats and Species of Principal Importance should be included in the ES. Consideration should also be given to those species and habitats included in the relevant Local BAP.

Natural England advises that a habitat survey (equivalent to Phase 2) is carried out on the site, in order to identify any important habitats present. In addition, ornithological, botanical and invertebrate surveys should be carried out at appropriate times in the year, to establish whether any scarce or priority species are present. The Environmental Statement should include details of:

- Any historical data for the site affected by the proposal (e.g. from previous surveys);
- Additional surveys carried out as part of this proposal;
- The habitats and species present;
- The status of these habitats and species (e.g. whether priority species or habitat);
- The direct and indirect effects of the development upon those habitats and species;
- Full details of any mitigation or compensation that might be required.

The development should seek if possible to avoid adverse impact on sensitive areas for wildlife within the site, and if possible provide opportunities for overall wildlife gain.

The record centre for the relevant Local Authorities should be able to provide the relevant information on the location and type of priority habitat for the area under consideration.

2.6 Ancient Woodland, ancient and veteran trees

The S41 list includes six priority woodland habitats, which will often be ancient woodland. Ancient woodland is an irreplaceable resource of great importance for its wildlife, its history and the contribution it makes to our diverse landscapes. The ES should have regard to the requirements under the National Planning Policy Framework (NPPF; para. 175).

Information about ancient woodland can be found in Natural England's standing advice.

3. Landscape Character

Landscape and visual impacts

Natural England would wish to see details of local landscape character areas mapped at a scale appropriate to the development site as well as any relevant management plans or strategies pertaining to the area. The EIA should include assessments of visual effects on the surrounding area and landscape together with any physical effects of the development, such as changes in topography.

The EIA should include a full assessment of the potential impacts of the development on local landscape character using landscape assessment methodologies. We encourage the use of Landscape Character Assessment (LCA), based on the good practice guidelines produced jointly by the Landscape Institute and Institute of Environmental Assessment in 2013. LCA provides a sound basis for guiding, informing and understanding the ability of any location to accommodate change and to make positive proposals for conserving, enhancing or regenerating character, as detailed proposals are developed.

Natural England supports the publication *Guidelines for Landscape and Visual Impact Assessment*, produced by the Landscape Institute and the Institute of Environmental Assessment and Management in 2013 (3rd edition). The methodology set out is almost universally used for landscape and visual impact assessment.

In order to foster high quality development that respects, maintains, or enhances, local landscape character and distinctiveness, Natural England encourages all new development to consider the character and distinctiveness of the area, with the siting and design of the proposed development reflecting local design characteristics and, wherever possible, using local materials. The Environmental Impact Assessment process should detail the measures to be taken to ensure the building design will be of a high standard, as well as detail of layout alternatives together with justification of the selected option in terms of landscape impact and benefit.

The assessment should also include the cumulative effect of the development with other relevant existing or proposed developments in the area. In this context Natural England advises that the cumulative impact assessment should include other proposals currently at Scoping stage. Due to the overlapping timescale of their progress through the planning system, cumulative impact of the proposed development with those proposals currently at Scoping stage would be likely to be a material consideration at the time of determination of the planning application.

The assessment should refer to the relevant National Character Areas which can be found on our website. Links for Landscape Character Assessment at a local level are also available on the same page.

Heritage Landscapes
You should consider whether there is land in the area affected by the development which qualifies for conditional exemption from capital taxes on the grounds of outstanding scenic, scientific or historic interest. An up-to-date list may be obtained at www.hmrc.gov.uk/heritage/lbsearch.htm.

4. Access and Recreation
Natural England encourages any proposal to incorporate measures to help encourage people to access greenspaces for quiet enjoyment. Measures such as reinstating existing footpaths together with the creation of new footpaths and bridleways are to be encouraged. Links to other green networks and, where appropriate, urban fringe areas should also be explored to help promote the creation of wider green infrastructure.

The EIA should consider potential impacts on access land, public open land and rights of way in the vicinity of the development. We also recommend reference to the relevant Right of Way Improvement Plans (ROWIP) to identify public rights of way within or adjacent to the proposed site that should be maintained or enhanced.

5. Soil and Agricultural Land Quality
Impacts from the development should be considered in light of the Government's policy for the protection of the best and most versatile (BMV) agricultural land as set out in paragraph 170 of the NPPF. We also recommend that soils should be considered in the context of the sustainable use of land and the ecosystem services they provide as a natural resource, as also highlighted in paragraph 170 of the NPPF.

Soil is a finite resource that fulfils many important functions and services (ecosystem services) for society, for example as a growing medium for food, timber and other crops, as a store for carbon and water, as a reservoir of biodiversity and as a buffer against pollution. It is therefore important that the soil resources are protected and used sustainably.

The applicant should consider the following issues as part of the Environmental Statement:

1. The degree to which soils are going to be disturbed/harmed as part of this development and whether 'best and most versatile' agricultural land is involved.

   This may require a detailed survey if one is not already available. For further information on the availability of existing agricultural land classification (ALC) information see www.magic.gov.uk. Natural England Technical Information Note 049 - *Agricultural Land Classification: protecting the best and most versatile agricultural land* also contains useful background information.

2. If required, an agricultural land classification and soil survey of the land should be undertaken. This should normally be at a detailed level, e.g. one auger boring per hectare, (or more detailed for a small site) supported by pits dug in each main soil type to confirm the physical characteristics of the full depth of the soil resource, i.e. 1.2 metres.

3. The Environmental Statement should provide details of how any adverse impacts on soils can be minimised. Further guidance is contained in the *Defra Construction Code of Practice for the Sustainable Use of Soil on Development Sites*.

6. Air Quality

Air quality in the UK has improved over recent decades but air pollution remains a significant issue; for example over 97% of sensitive habitat area in England is predicted to exceed the critical loads for ecosystem protection from atmospheric nitrogen deposition ([redacted] Defra 2011). A priority action in the England Biodiversity Strategy is to reduce air pollution impacts on biodiversity. The planning system plays a key role in determining the location of developments which may give rise to pollution, either directly or from traffic generation, and hence planning decisions can have a significant impact on the quality of air, water and land. The assessment should take account of the risks of air pollution and how these can be managed or reduced. Further information on air pollution impacts and the sensitivity of different habitats/designated sites can be found on the Air Pollution Information System ([redacted] Further information on air pollution modelling and assessment can be found on the Environment Agency website.

7. Climate Change Adaptation

The England Biodiversity Strategy published by Defra establishes principles for the consideration of biodiversity and the effects of climate change. The ES should reflect these principles and identify how the development's effects on the natural environment will be influenced by climate change, and how ecological networks will be maintained. The NPPF requires that the planning system should contribute to the enhancement of the natural environment 'by establishing coherent ecological networks that are more resilient to current and future pressures' (NPPF Para 174), which should be demonstrated through the ES.

8. Cumulative and in-combination effects

A full consideration of the implications of the whole scheme should be included in the ES. All supporting infrastructure should be included within the assessment.

The ES should include an impact assessment to identify, describe and evaluate the effects that are likely to result from the project in combination with other projects and activities that are being, have been or will be carried out. The following types of projects should be included in such an assessment, (subject to available information):

a. existing completed projects;
b. approved but uncompleted projects;
c. ongoing activities;
d. plans or projects for which an application has been made and which are under consideration by the consenting authorities; and
e. plans and projects which are reasonably foreseeable, i.e. projects for which an application has not yet been submitted, but which are likely to progress before completion of the development and for which sufficient information is available to assess the likelihood of cumulative and in-combination effects.

From: [redacted] on behalf of Town Planning LNE
To: DraxBECCS
Subject: Ref EN010120-000019-210119 - Scoping consultation for Drax Bioenergy with Carbon Capture and Storage Project 02 February 2021 09:35:49
Date: image001.png
Attachments:

OFFICIAL

FAO – Environmental Services
Ref – EN010120-000019-210119
Proposal – Scoping Consultation for the Drax Bioenergy with Carbon Capture and Storage Project Location – Drax Power Station

Thank you for your letter of 19 January 2021 providing Network Rail with an opportunity to comment on the abovementioned scoping opinion.

With reference to the protection of the railway, the Environmental Statement should consider any impact of the scheme upon the railway infrastructure and upon operational railway safety. It should also include a Transport Assessment to identify any HGV traffic/haulage routes that may utilise railway assets such as bridges and level crossings.

Kind regards

Matt Leighton
Town Planning Technician
Diversity and Inclusion Champion
Network Rail Property - Eastern Region
George Stephenson House, Toft Green, York, YO1 6JT

From:	[redacted]
To:	DraxBECCS
Cc:	Planning
Subject:	EN010120-000019-210119 - Drax Bioenergy with Carbon Capture and Storage Project - Scoping consultation (Our ref: SCO/2021/1)
Date:	16 February 2021 16:33:12
Attachments:	StayHomeEmailBanner-01_fa464182-47ee-430c-a9b2-e77d2085fa7c.png

Dear Sir/Madam,

Thank you for your letter dated 19 January 2021 and the scoping consultation in respect of the application by Drax Power Limited for an Order granting Development Consent for the Drax Bioenergy with Carbon Capture and Storage Project.

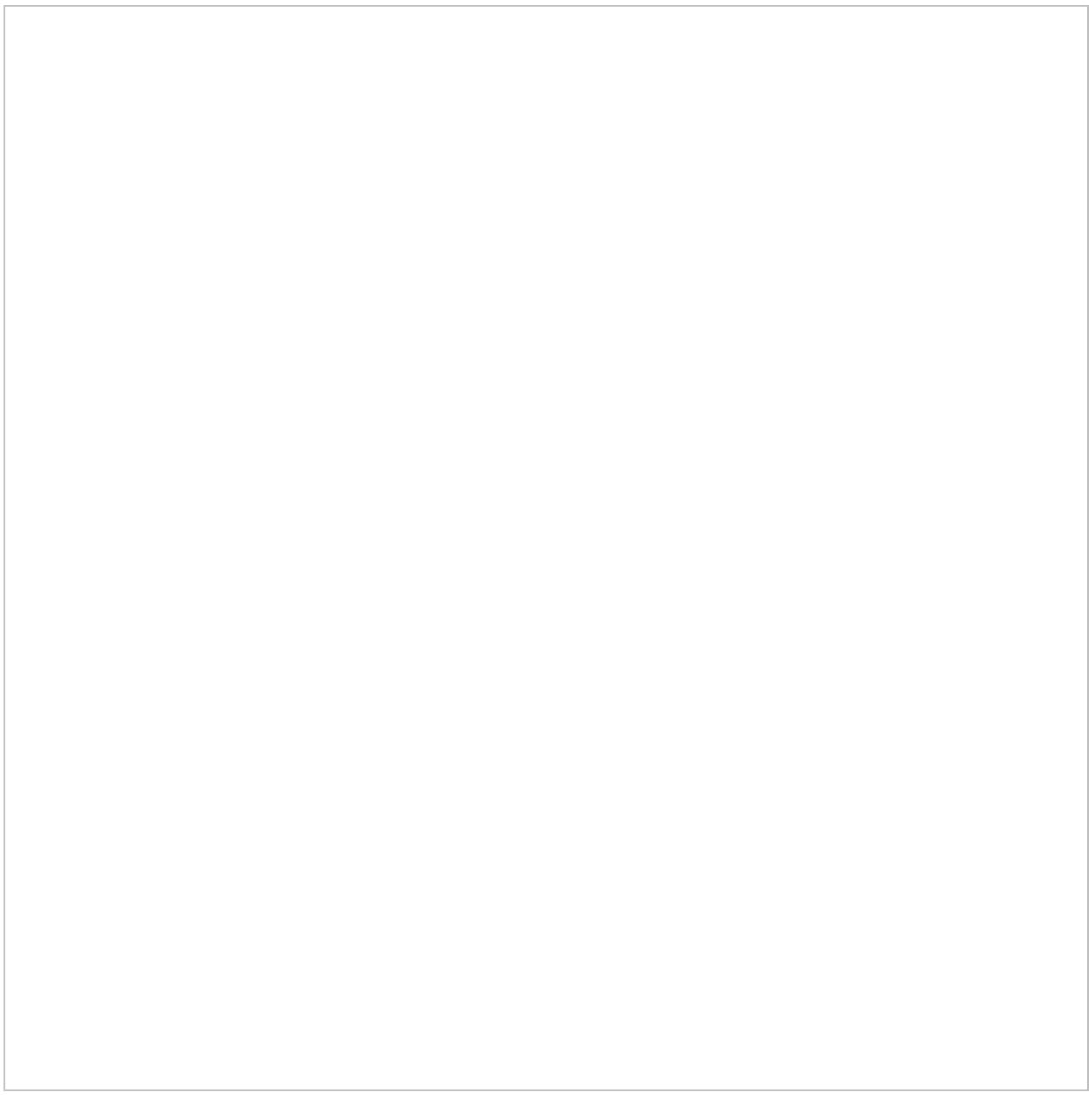
I can confirm that North Lincolnshire Council has no comments to make in respect of this Scoping Opinion.

Kind Regards

Andrew Law
Development Management Specialist

Development Management
North Lincolnshire Council
30-40 High Street
SCUNTHORPE
DN15 6NL

Tel: [redacted] (Direct Dial)



Michael Reynolds
Business and Environmental Services
East Block
County Hall
Racecourse Lane
Northallerton
DL7 8AD

Tel: [redacted]

Email:
[redacted]@northyorks.gov.uk

The Planning Inspectorate
By Email
DraxBECCS@planninginspectorate.gov.uk

Our Ref: Michael Reynolds
Your Ref: EN010120-000019-210119

Date: 16 February 2021

Dear Sirs

Drax BECCS
Scoping Report

Thank you for consulting North Yorkshire County Council and Selby District Council on the scoping report for the above project.

Please accept this response on behalf of both North Yorkshire County Council and Selby District Council.

Our responses on the various chapters are as follows:

Ecology

Thank you for your consultation on the above scoping document at this early stage.

The approach to the Habitat Regulations Assessment (HRA) is supported. The HRA will be undertaken by the consenting authority with the applicant providing sufficient information in order that the authority can fully assess the proposals against the conservation objectives and qualifying features of the sites. If any Natura 2000 sites are scoped out of the HRA sufficient justification for this should be included. The international sites identified within Table 9.2 are considered to be appropriate to the HRA assessment.

I fully support the inclusion of ecological receptors within the air quality assessments – this information will be important in informing the HRA process.

It is noted (Table 9.4) that the loss or disturbance of common and widespread habitats of negligible nature conservation importance has been scoped out of the ES. This is understood as the purpose of the ES is to make an assessment of significant effects. However, in relation to assessing and reporting on Biodiversity Net Gain, if using the Defra Metric there will be a need to map the extent,

type and condition of all habitats to be lost as part of the development in order to record accurate figures.

The approach to ecological assessment set out in 9.7 is supported as it follows current best practice guidance. At this stage most of the ecological information available is either desk based or available from previous planning applications. This gives an understanding of the types of habitats present within and surrounding the development site and the species supported by these habitats. It provides a good baseline and has assisted in the targeting of specific surveys.

I am supportive of the surveys proposed within sections 9.7.3 to 9.7.5 of the scoping report.

I am pleased that at this early stage the development is considering opportunities for ecological enhancement and biodiversity net gain (9.5.2). I would encourage use of the most up to date version of the Defra Biodiversity Metric in presenting data on biodiversity losses and gains. I am also pleased to see that land to the north of the development has been identified as a potential area to provide ecological mitigation. This area will be well placed to mitigate and compensate for any unavoidable losses resulting from the development and could also provide opportunities for delivering net gain within the local area.

Historic Environment

We have read the relevant parts of the scoping report and have no objection to the proposed methodology for archaeological assessment. The majority of the site has already been subject to geophysical survey and some trial trenching as well. I have no comments to make on the scoping report.

Landscape

Thank you for your Landscape consultation on the above Scoping Report.

In relation to Landscape and Visual effects I am generally supportive of the proposed ES methodology set out in chapter 10, but I also have the following comments:

LVIA Methodology – I would support the proposed methodology, that the LVIA should follow guidance as set out in GLVIA Third Edition (LI and IEMA, 2013), An approach to Landscape Character Assessment (Natural England 2014), and Landscape Institute Technical Guidance Note 06/119: Visual Representation of Development Proposals.

Detailed Study of Existing Landscape Components - The Applicant should undertake a detailed topographical survey to be used to understand and explain the all the key features and characteristics of the existing site including levels and landform, buildings and structures, existing vegetation and screening, hard / soft surfaces.

Cumulative Effects – There should be consideration of cumulative construction effects should the construction programme overlap with other recently approved schemes including the Drax Repower NSIP.

Existing Trees and Vegetation – this should be reviewed, protected and retained where appropriate. Tree survey and arboricultural impact assessment should be to BS5837. This is important if vegetation is needed for ongoing screening of the site and to protect restored areas of the site.

Soil Management / Agricultural Land – a soil survey, assessment and management plan are needed in order to protect and manage site soils, including protection and restoration of ALC best and most versatile land where appropriate.

Study Area – For the LVIA I would support the proposal for a maximum study of 10km from the site boundary with a focused 3km study area on built and natural environmental features. I would also support the proposal that this should be extended to a 15km radius for the purposes identifying 'other development' for the assessment of cumulative effects.

Assessment Viewpoints, Mapping and ZTV – The principle of establishing a ZTV using a DTM is acceptable but this should be verified through fieldwork to establish an accurate visual envelope.

The principle of using representative viewpoints to illustrate the experience of different types of visual receptor is acceptable, however the assessment should aim describe and assess the full effects of the development (not limited to a summary of viewpoints). The assessment should provide mapping of the landscape and visual effects to help quantify and illustrate the geographical extent of all receptors and likely effects of the development.

The initial proposed list of viewpoints (para. 10.7.3) would be acceptable (subject to a ZTV, site survey and final Proposed Scheme details).

Photographs and Photomontages - I would welcome the proposed method and approach to photographs and photomontages, in-line with Technical Guidance Note (TGN) 06/19 Visual Representation of Development Proposals (Landscape Institute, 2019).

I would agree that for annotated photo-panoramas TGN 06/19 Type 1 or additional wirelines to TGN 06/19 Type 2 are most appropriate. For viewpoints selected for photomontages I would suggest at least Type 3, but Type 4 should be considered where sensitivity of context, scale and proximity of the development warrant it. I would wish to see a realistic impression of scale and detail.

I would wish to see photomontages explain how adverse effects will be mitigated over time. Photographs should include winter views where possible to explain the worst-case scenario.

Appendix 3 and 4 in TGN 06/19 should be noted, with camera / tripod height / position in the field adjusted as necessary so that views show the full extent of the site / development and show the effect it has upon the receptor location. Views of the site should not be unnecessarily obscured by buildings, roadside hedgerows or other vegetation.

I would welcome the opportunity to discuss viewpoints and photomontages further once a ZTV, site survey and final Proposed Scheme details have been produced.

Site Design - I would support consideration of the original design intent as set out by AE Weddle's 1966 Landscape and Mitigation Report (para. 10.2.3). Given the scale of the existing Drax site and the significant changes that have taken place since the original report, I would like to see a clear revised design strategy for the site.

This strategy should explain how the current application achieves principles of 'good design' in context of the site as a whole, for the overall composition of site structures, massing, layout, colour and materials, aiming to reduce overall massing, visual coalescence and site clutter.

The potential for additional cooling towers is outlined at para. 2.2.12. I would also like to see consideration of other low-profile cooling solutions and plume eliminators, being less visually obtrusive, to demonstrate good design and in consideration of alternatives.

Landscape Proposals, Mitigation, Maintenance and Aftercare – I would like to see a landscape strategy for proposed scheme, which should consider the wider Drax site and future maintenance responsibilities. The proposed scheme should avoid removing or double-counting landscape mitigation previously committed as part of other planning approvals and NSIPs.

I would like to see consideration of both Landscape and Biodiversity objectives for the site as a clear joined-up approach.

Landscape proposals and mitigation should be proportionate to the scale of the development and should have regard for and contribute to the wider landscape character and setting, local amenity with clear aims and objectives.

Landscape proposals should support the Government's commitment to improving green infrastructure, health and wellbeing, as set out in the 25 Year Environment Plan. The Leeds City Region Green and Blue Infrastructure Strategy, NPPF and other local policy, also recognise GI.

Highways and Drainage

NYCC in its capacities as LLFA and LHA is happy to be consulted directly on the work and approaches have already been made.

The scope reflects previous wider conversations regarding the site and the evidence base.

SDC Conservation officer

It doesn't scope anything out of needing further assessment so that is good (with the proposed study areas), except -

Re. non-designated heritage assets (above ground / buildings) – if they are relying on third party data, it would likely that NDHA's may be missed as Selby do not hold a local list or any other record of NDHA's (and any potential recorded on the HER would not constitute a complete list). Therefore, a survey of historic OS maps in combination with site visits would most likely be needed to identify such assets.

Contaminated Land Comments

Chapter 12 of the EIA Scoping Report covers ground conditions and potential land contamination issues. It shows that the site was undeveloped agricultural land from approximately 1851. In 1891, a railway and engine house were present in the east. In 1938, a depot was present in the west, which was a former airship factory, munitions depot and prisoner of war camp during World War II. From 1974, the Drax Power Station site is present. This expands throughout the latter part of the 20th Century to include a sewage works.

It is proposed to include a chapter on ground conditions in the ES. This chapter will establish the existing ground conditions underlying the proposed scheme and surrounding area and will assess the likely significant effects of the proposed scheme on the ground conditions.

The report states that any contaminants identified during the construction phase will be remediated in line with the proposed uses. Clean cover layers (and any imported material), if required, will be validated for depth and chemical quality prior to the proposed scheme becoming operational. This negates the requirement for consideration of potential impacts to future users, third party neighbours, potable water supply and plants from contamination during the operational phase of the proposed scheme.

In relation to ground conditions, the report concludes that the construction phase has been scoped in and that the operational phase has been scoped out of further assessment.

Our comments and recommendations:

The former site uses could have given rise to land contamination, so an investigation and risk assessment is needed to characterise the contamination regime at the site. If significant contamination is found, then appropriate remedial action will be needed to protect human health, controlled waters and the wider environment and to make the site suitable for its proposed use. I would agree that a chapter on ground conditions should be included within the ES.

<u>Environmental Health</u>

Further to your consultation dated 25th January 2021 concerning the above proposals. I have considered the information provided by the applicant and would make the following comments in relation to the areas specified. Other areas of the report have not been considered.

Assessment Of Likely Significant Effects:

I have no objections to the assessment of the significant effects in theory but where the issues under consideration, which in the areas I consider will be noise, vibration and air quality both during construction and operation, have standards to which they need to comply or their own documented significance of effects method the matrix in Table 3.1 should not be applied. For example a BS4142 assessment should be made in relation to the industrial noise from the proposed development. This British Standard assess the impacts in terms of significant adverse and adverse impacts and this is the reference that should be given in the noise assessment chapter.

I would further comment that where an environmental factor is already near a limit the magnitude of change should not be a factor and any increase towards the limit should be viewed as significant and negative.

Air Quality:

I have considered Chapter 7: Air Quality and would make the following comments:

7.2.4 it is noted that coal fired units at Drax Power Station will not form part of the future baseline scenario as it is anticipated that commercial goal generation will end in March 2021 but formal closure will not take place until September 2022 (2.1.3) so before the construction period is due to commence in 2024. It may be useful, however, to provide some information to demonstrate how the baseline changes due to the closure of these coal fired units.

7.3.1 it is suggested that the Study Area should include areas where any possible grounding of the plume from any stacks associated with the development occur or if the emissions from a stack have altered due to the development.

7.3.2 the use of the Air Quality Management (IAQM) on the assessment of dust from demolition and construction (Institute of Air Quality Management, 2014) guidance is accepted for the construction phase of the development.

7.4.2 a map showing the position of the sensitive receptors/resources is requested in the EIA chapter on air quality. I would also question the position of Grand Cottages (Grange Cottages possibly).

7.5.1 this section indicates that some assessment of the dust from construction has already taken place under the IAQM guidance. How this has been determined should be shown in full in the EIA chapter on Air Quality.

7.5.2 it is noted that it is intended to use the existing main stack (259m) for the discharge of emissions. I am aware that the emissions from the stack are controlled by permit from the Environment Agency and need to meet the levels laid down in the IED. However, modelling of the emissions from the stack should be provided in the EIA chapter on Air Quality. Emissions from other emission points should also be assessed and modelled in combination.

Table 7.1 it is noted that the impact of traffic during construction and operation are scoped out of the assessment. This is based on assumed traffic figures and as pointed out in the table in relation to construction traffic figures the levels are not known. This should, therefore, be kept under review and reference made to the most up to date levels in the assessment chapter of the EIA. Where the traffic figures are found to exceed the IAQM criteria an assessment should be made.

Currently the upgrade of Drax Jetty and Road Improvements is a potential development to support the transport of abnormal indivisible loads (AILS). I would support the use of Drax Jetty for AILS and other materials being delivered to the site. The use or not of this jetty will impinge on the traffic numbers to site and hence the scoping out of emissions of Nox from construction vehicles may need to be reviewed.

Noise and Vibration:

The mitigation measures set out in 8.5.1 for the construction phase are welcomed and should be employed as part of a Construction Environmental Management Plan.
It is noted from Table 8.3 that transportation noise and vibration have been scoped out of the assessment as they traffic flows are not expected on the road network by more than 10% and are therefore not. Please provide the justification of this level of increase not being significant and also detail if this expected level of traffic irrespective of the use of the Drax Jetty.

I would also comment that the traffic figures likely to be generated by both construction and operation have yet to be agree with the Highways Authority and until they are agreed the increase in traffic is still subject to change. Hence this issue should be kept under review.

Once the traffic figures are agreed the noise impact assessment should consider both the operational and traffic noise together as some of the receptors will be subjected to both at the same time.

As proposed in 8.7.1 consultation on the baseline noise survey is welcomed as is the assessment using BS4142:2014+A1:2019. The assessment criteria with this British Standard is recommended for the assessment of significance as referred to in 8.7.9.

External Lighting:

Whilst it is mentioned in a number of areas of the report that external lighting with be provided including lighting columns it is not documented that an assessment of light spill would be carried out to ensure the protection of residential amenity and that it is assumed that any new lighting will comply with the same standards. But these standards are not defined. I would, therefore, request that some assessment of the additional lighting to the site is provided with the application.

In regard to construction lighting it is mentioned that the lighting will be temporary and within the context of operational lighting and so will not be assessed. I would request that where additional external lighting is required for the construction phase that an assessment is made of the impact on residential amenity and relevant levels agreed.
Security lighting is proposed at the upgraded Drax jetty. This will also need consideration to ensure that it does not impinge on residents in the area.

NORTH YORKSHIRE
FIRE & RESCUE SERVICE

NYFRS Reference: Premises: 00395619
Job: 1217946

York Fire Station
Kent Street
York
North Yorkshire
YO10 4AH

When telephoning please ask for: K Caulfield

Tel: [redacted]
Fax: [redacted]

Email: [redacted]@northyorksfire.gov.uk

25 January 2021

Dear Sir or Madam

Energy Storage Facility, Land Off New Road, Drax, Selby, YO8 8PQ

FIRE SAFETY - COMMUNICATION WITH THE PLANNING AUTHORITY

Receipt is acknowledged of your planning communication:

Dated: 19/01/2021
Plans No: EN010120-000019-210119

Your communication has been dealt with as follows:

At this stage in the planning approval process the North Yorkshire Police, Fire and Crime Commissioner Fire and Rescue Authority have no objection/observation to the proposed development. The North Yorkshire Police, Fire and Crime Commissioner Fire and Rescue Authority will make further comment in relation to the suitability of proposed fire safety measures at the time when the building control body submit a statutory Building Regulations consultation to the Fire Authority.

The majority of information we collect regarding business fire safety is non-personalised information, however any personal data we collect will be managed in accordance with our Privacy Notice which can be viewed on our website, www.northyorksfire.gov.uk/ about-us/yourdata.

Under the Regulatory Reform Order 2005 we are obliged to publish a public register of enforcement action which can be viewed via our website, www.northyorksfire.gov.uk/about-us/key-documents/links-registers.

Energy Storage Facility
Land Off New Road
Drax
Selby
YO8 8PQ

Should you require further information please contact the officer whose name appears at the head of the letter.

Yours faithfully

K Caulfield

From: [redacted]
To: DraxBECCS
Subject: Drax Power Ltd - request for a Scoping Opinion EN010120-000019-210119
Date: 05 February 2021 11:57:23
Attachments: 0.jpg

Dear Sir or Madam

I refer to your letter of consultation dated 19 January 2021, regarding the above, and can confirm that this Authority has no comments to make at this stage.

Rob Smith
Senior Minerals Planner

North York Moors National Park Authority
The Old Vicarage
Bondgate
Helmsley
York
YO62 5BP

Tel. no. [redacted]
Web: [redacted]

Public Health England

Environmental Hazards and Emergencies Department
Centre for Radiation, Chemical and Environmental Hazards (CRCE)
Seaton House
City Link
London Road
Nottingham
NG2 4LA

nsipconsultations@phe.gov.uk

www.gov.uk/phe

Your Ref: EN01020-000019-210119
Our Ref: 55763

Ms Alison Down
EIA Advisor
Th Planning Inspectorate
Temple Quay House
2 the Square
Bristol BS1 6PN

16th February 2021

Dear Ms Down

Nationally Significant Infrastructure Project
Drax Bioenergy with Carbon Capture and Storage Project
Scoping Consultation Stage

Thank you for including Public Health England (PHE) in the scoping consultation phase of the above application. Advice offered by PHE is impartial and independent.

PHE exists to protect and improve the nation's health and wellbeing and reduce health inequalities; these two organisational aims are reflected in the way we review and respond to Nationally Significant Infrastructure Project (NSIP) applications.

The health of an individual or a population is the result of a complex interaction of a wide range of different determinants of health, from an individual's genetic make-up, to lifestyles and behaviours, and the communities, local economy, built and natural environments to global ecosystem trends. All developments will have some effect on the determinants of health, which in turn will influence the health and wellbeing of the general population, vulnerable groups and individual people. Although assessing impacts on health beyond direct effects from for example emissions to air or road traffic incidents is complex, there is a need to ensure a proportionate assessment focused on an application's significant effects.

Having considered the submitted scoping report we wish to make the following specific comments and recommendations:

Environmental Public Health
We understand that the promoter will wish to avoid unnecessary duplication and that many issues including air quality, emissions to water, waste, contaminated land etc. will be covered elsewhere in the Environmental Statement (ES). We believe the summation of relevant issues into a specific section of the report provides a focus which ensures that public health is given adequate consideration. The section should summarise key information, risk assessments, proposed mitigation measures, conclusions and residual impacts, relating to human health. Compliance with

the requirements of National Policy Statements and relevant guidance and standards should also be highlighted.

In terms of the level of detail to be included in an ES, we recognise that the differing nature of projects is such that their impacts will vary. The attached appendix summarises our requirements and recommendations regarding the content of and methodology used in preparing the ES. Please note that where impacts relating to health and/or further assessments are scoped out, promoters should fully explain and justify this within the submitted documentation.

Human Health and Wellbeing

This section of our scoping response, identifies the wider determinants of health and wellbeing we expect the Environmental Statement (ES) to address, to demonstrate whether they are likely to give rise to significant effects. We have focused our approach on scoping determinants of health and wellbeing under four themes, which have been derived from an analysis of the wider determinants of health mentioned in the National Policy Statements. The four themes are:

- Access
- Traffic and Transport
- Socioeconomic
- Land Use

Having considered the submitted scoping report PHE wish to make the following specific comments and recommendations:

Sensitive receptors

The scoping report identifies the potential requirement for the Drax Jetty to be upgraded for the use of abnormal load handling. The report identifies recreational users utilising the Trans Pennine Trail running along the northern banks of River Ouse and the Trans Pennine Trail National Cycle Route which runs along part of the River Ouse will be considered as potential sensitive visual receptors. This will be in addition to users of the Public Right of Way (PRoW) network and Drax Golf Course. The report does not consider the recreational or personal marine use of the River Ouse that may be affected by the jetty upgrade or shipping movements.

Recommendation

The ES should identify the nature and number of any sensitive receptors that use the River Ouse as a result of upgrade work to the jetty or the transportation of abnormal loads. The ES should assess the impacts and effects on these sensitive receptors, whether this be visual, noise, air quality or normal access and use of the river.

Yours sincerely

For and on behalf of Public Health England
nsipconsultations@phe.gov.uk

Please mark any correspondence for the attention of National Infrastructure Planning Administration.

Appendix: PHE recommendations regarding the scoping document

Introduction

The Planning Inspectorate's Advice Note 11: Working with Public Bodies covers many of the generic points of interaction relevant to the Planning Inspectorate and Public Health England (PHE). The purpose of this Annex is to help applicants understand the issues that PHE expect to see addressed by applicants preparing an Environmental Statement (ES) as part of their Nationally Significant Infrastructure Planning (NSIP) submission

We have included a comprehensive outline of the type of issues we would expect to be considered as part of an NSIP which falls under the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations). PHE encourages applicants to contact us as early in the process as possible if they wish to discuss or clarify any matters relating to chemical, poison, radiation or wider public health.

General Information on Public Health England

PHE was established on 1 April 2013 to bring together public health specialists from more than 70 organisations into a single public health service. We are an executive agency of the Department of Health and are a distinct delivery organisation with operational autonomy to advise and support government, local authorities and the National Health Service (NHS) in a professionally independent manner.

PHE's NSIP related roles and responsibilities and geographical extent

PHE is a statutory consultee in the NSIP process for any *applications likely to involve chemicals, poisons or radiation which could potentially cause harm to people and are likely to affect significantly public health*.[1] PHE will consider the potential significant effects (direct and indirect) of a proposed development on population and human health and the impacts from chemicals, radiation and environmental hazards.

Under certain circumstances PHE may provide comments on ionising radiation to/on behalf of the Scottish Parliament. If a proposer is submitting a planning application in Scotland which may require advice on radiation you are recommended to contact the appropriate Scottish Planning Authority for advice on how to proceed.

In the case of applications in Wales, PHE remains a statutory consultee but the regime applies to a more limited range of development types. For NSIP applications likely to affect land in Wales, an applicant should still consult PHE but, additionally will be required to consult the Welsh Ministers.

Role of Public Health England and NSIP with respect to Environmental Impact Assessments

PHE has a statutory role as a consultation body under the EIA Regulations. Where an applicant has requested a scoping opinion from the Planning Inspectorate[2] in relation to a proposed NSIP, PHE will be consulted by the Planning Inspectorate about the scope, and level of detail, of the information to be provided in the ES and will be under a duty to make information available to the applicant. PHE's standard recommendations in response to EIA scoping consultations are below.

PHE also encourages applicants to discuss with them the scope of the ES at an early stage to explore, for example, whether careful site selection or other design issues could minimise or eliminate public health impacts or to outline the requirement for, scope and methodology of any assessments related to public health.

PHE's recommendations to applicants regarding Environmental Impact Assessments

General approach

[1] The Infrastructure Planning (Interested Parties and Miscellaneous Prescribed Provisions) Regulations 2015

[2] The scoping process is administered and undertaken by the Planning Inspectorate on behalf of the Secretary of State

Applicants are reminded that Section 5(2)(a) of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 specifically includes a requirement that the EIA must identify, describe and assess in an appropriate manner, in light of each individual case, the direct and indirect significant effects of the proposed development on population and human health.

PHE is of the opinion that this requirement encompasses the wider determinants of public health, as well as chemicals, poisons and radiation. Further information on PHE's recommendations and requirements is included below.

It is the role of the applicant to prepare the ES. PHE provides advice relating to EIA within this document and during the NSIP consultation stages.

When preparing an ES the applicant should give consideration to best practice guidance such as the Government's Handbook for scoping projects: environmental impact assessment[3] , IEMA Guide to Delivering Quality Developments[4], and Guidance: on Environmental Impact Assessment[5]

The Planning Inspectorate's Advice Note Seven: Environmental Impact Assessment: Process, Preliminary Environmental Information and Environmental Statements also provide guidance to applicants and other persons with interest in the EIA process as it relates to NSIPs.
It is important that the submitted ES identifies and assesses the potential public health impacts of the activities at, and emissions from, the development.

PHE understands that there may be separate sections of the ES covering the assessment of impacts on air, land, water and so on, but expects an ES to include a specific section summarising potential impacts on population and health. This section should bring together and interpret the information from other assessments as necessary. The health and population impacts section should address the following steps.

1. Screening: Identify and significant effects.
    a. Summarise the methodologies used to identify health impacts, assess significance and sources of information
    b. Evaluate any reference standards used in carrying out the assessment and in evaluating health impacts (e.g., environmental quality standards)
    c. Where the applicant proposes the 'scoping out' of any effects a clear rationale and justification should be provided along with any supporting evidence.

2. Baseline Survey:
    a. Identify information needed and available, Evaluate quality and applicability of available information
    b. Undertake assessment

3. Alternatives:
    a. Identify and evaluate any realistic alternative locations, routes, technology etc.

4. Design and assess possible mitigation
    a. Consider and propose suitable corrective actions should mitigation measures not perform as effectively predicted.

5. Impact Prediction: Quantify and Assess Impacts:

[3] https://www.gov.uk/government/publications/handbook-for-scoping-projects-environmental-impact-assessment
[4] https://www.iema.net/assets/newbuild/documents/Delivering%20Quality%20Development.pdf
[5] https://www.gov.uk/guidance/environmental-impact-assessment#the-purpose-of-environmental-impact-assessment

a. Evaluate and assess the extent of any positive and negative effects of the development. Effects should be assessed in terms of likely health outcomes, including those relating to the wider determinants of health such as socio-economic outcomes, in addition to health outcomes resulting from exposure to environmental hazards. Mental health effects should be included and given equivalent weighting to physical effects.
b. Clearly identify any omissions, uncertainties and dependencies (e.g., air quality assessments being dependant on the accuracy of traffic predictions)
c. Evaluate short-term impacts associated with the construction and development phase
d. Evaluate long-term impacts associated with the operation of the development
e. Evaluate any impacts associated with decommissioning
f. Evaluate any potential cumulative impacts as a result of the development, currently approved developments which have yet to be constructed, and proposed developments which do not currently have development consent

6. Monitoring and Audit (not a statutory requirement)
    a. Identify key modelling predictions and mitigation impacts and consider implementing monitoring and audit to assess their accuracy / effectiveness.

Any assessments undertaken to inform the ES should be proportionate to the potential impacts of the proposal, therefore we accept that, in some circumstances particular assessments may not be relevant to an application, or that an assessment may be adequately completed using a qualitative rather than quantitative methodology. In cases where this decision is made, the applicant should fully explain and justify their rationale in the submitted documentation.

Consideration of alternatives (including alternative sites, choice of process, and the phasing of construction) is widely regarded as good practice. Ideally, the EIA process should start at the stage of site selection, so that the environmental merits of practicable alternatives can be properly considered. Where this is undertaken, the main alternatives considered should be outlined in the ES[6].

Human and environmental receptors

The applicant should clearly identify the development's location and the location and distance from the development of off-site human receptors that may be affected by emissions from, or activities at, the development. Off-site human receptors may include people living in residential premises; people working in commercial, and industrial premises and people using transport infrastructure (such as roads and railways), recreational areas, and publicly-accessible land.

Identify and consider impacts on residential areas and sensitive receptors (such as schools, nursing homes and healthcare facilities, as well as other vulnerable population groups such as those who are young, older, with disabilities or long-term conditions, or on low incomes) in the area(s) which may be affected by emissions, this should include consideration of any new receptors arising from future development

Consideration should also be given to environmental receptors such as the surrounding land, watercourses, surface and groundwater, and drinking water supplies such as wells, boreholes and water abstraction points.

Impacts arising from construction and decommissioning

Any assessment of impacts arising from emissions or activities due to construction and decommissioning should consider potential impacts on all receptors and describe monitoring and mitigation during these phases. Construction and decommissioning will be associated with vehicle movements and cumulative impacts should be accounted for.

[6] DCLG guidance, 1999 http://www.communities.gov.uk/documents/planningandbuilding/pdf/155958.pdf

We would expect the applicant to follow best practice guidance during all phases from construction to decommissioning to ensure appropriate measures are in place to mitigate any potential negative impact on health from emissions (point source, fugitive and traffic-related) and activities. An effective Construction Environmental Management Plan (CEMP) (and Decommissioning Environmental Management Plan (DEMP)) will help provide reassurance that activities are well managed. The applicant should ensure that there are robust mechanisms in place to respond to any complaints made during construction, operation, and decommissioning of the facility.

Emissions to air and water

Significant impacts are unlikely to arise from industrial installations which employ Best Available Techniques (BAT) and which meet regulatory requirements concerning emission limits and design parameters. However, PHE has a number of comments regarding the assessment of emissions from any type of development in order that the ES provides a comprehensive assessment of potential impacts.

When considering a baseline (of existing environmental quality) and in the assessment and future monitoring of impacts these should:

- include appropriate screening assessments and detailed dispersion modelling where this is screened as necessary
- encompass the combined impacts of all pollutants which may be emitted by the development with all pollutants arising from associated development and transport, considered in a single holistic assessment (ie, of overall impacts)
- include Chemical Abstract Service (CAS) numbers alongside chemical names, where referenced in the ES
- consider the construction, operational, and decommissioning phases
- consider the typical operational emissions and emissions from start-up, shut-down, abnormal operation and accidents when assessing potential impacts and include an assessment of worst-case impacts
- fully account for fugitive emissions
- include appropriate estimates of background levels
    - when assessing the human health risk of a chemical emitted from a facility or operation, background exposure to the chemical from other sources should be taken into account
- identify cumulative and incremental impacts (ie, assess cumulative impacts from multiple sources), including those arising from associated development, other existing and proposed development in the local area, and new vehicle movements associated with the proposed development; associated transport emissions should include consideration of non-road impacts (ie, rail, sea, and air)
- include consideration of local authority, Environment Agency, Natural Resources Wales, Defra national network, and any other local site-specific sources of monitoring data
- compare predicted environmental concentrations to the applicable standard or guideline value for the affected medium. Where available, the most recent UK standards for the appropriate media (ie, air, water, and/or soil) and health-based guideline values should be used when quantifying the risk to human health from chemical pollutants
- where UK standards or guideline values are not available, use those recommended by the European Union or World Health Organization:
    - If no standard or guideline value exists, the predicted exposure to humans should be estimated and compared to an appropriate health-based value (eg, a Tolerable Daily Intake or equivalent)
    - This should consider all applicable routes of exposure (eg, include consideration of aspects such as the deposition of chemicals emitted to air and their uptake via ingestion)
- when quantitatively assessing the health risk of genotoxic and carcinogenic chemical pollutants, PHE does not favour the use of mathematical models to extrapolate from high dose levels used in animal carcinogenicity studies to well below the observed region of a dose-response relationship. When only animal data are available, we recommend that the 'Margin of Exposure' (MOE) approach[1] is used

- identify and consider impacts on residential areas and sensitive receptors (such as schools, nursing homes and healthcare facilities) in the area(s) which may be affected by emissions. This should include consideration of any new receptors arising from future development

Whilst screening of impacts using qualitative methodologies is common practice (eg, for impacts arising from fugitive emissions such as dust), where it is possible to undertake a quantitative assessment of impacts then this should be undertaken.

PHE's view is that the applicant should appraise and describe the measures that will be used to control both point source and fugitive emissions and demonstrate that standards, guideline values or health-based values will not be exceeded due to emissions from the installation, as described above. This should include consideration of any emitted pollutants for which there are no set emission limits. When assessing the potential impact of a proposed installation on environmental quality, predicted environmental concentrations should be compared to the permitted concentrations in the affected media; this should include both standards for short and long-term exposure. Further to assessments of compliance with limit values, for non-threshold pollutants (ie, those that have no threshold below which health effects do not occur) the **benefits** of development options which reduce population exposure should be evaluated.

Additional points specific to emissions to air
When considering baseline conditions (of existing air quality) and the assessment and future monitoring of impacts, these should include:

- consideration of impacts on existing areas of poor air quality e.g. existing or proposed local authority Air Quality Management Areas (AQMAs)
- modelling using appropriate meteorological data (i.e. come from the nearest suitable meteorological station and include a range of years and worst-case conditions)
- modelling taking into account local topography, congestion and acceleration
- evaluation of the public health **benefits** of development options which reduce air pollution – even below limit values – as pollutants such as nitrogen dioxide and particulate matter show no threshold below which health effects do not occur

Additional points specific to emissions to water
When considering baseline conditions (of existing water quality) and the assessment and future monitoring of impacts, these should:

- include assessment of potential impacts on human health and not focus solely on ecological impacts
- identify and consider all routes by which emissions may lead to population exposure (e.g., surface watercourses, recreational waters, sewers, geological routes etc.)
- assess the potential off-site effects of emissions to groundwater (eg, on aquifers used for drinking water) and surface water (used for drinking water abstraction) in terms of the potential for population exposure
- include consideration of potential impacts on recreational users (eg, from fishing, canoeing etc.) alongside assessment of potential exposure via drinking water

Land quality

We would expect the applicant to provide details of any hazardous contamination present on site (including ground gas) as part of a site condition report.
Emissions to and from the ground should be considered in terms of the previous history of the site and the potential of the site, once operational, to give rise to issues. Public health impacts associated with ground contamination and/or the migration of material off-site should be assessed[7] and the potential impact on nearby receptors and control and mitigation measures should be outlined.

[7] Following the approach outlined in the section above dealing with emissions to air and water i.e. comparing predicted environmental concentrations to the applicable standard or guideline value for the affected medium (such as Soil Guideline Values)

Relevant areas outlined in the Government's Good Practice Guide for EIA include:

- effects associated with ground contamination that may already exist
- effects associated with the potential for polluting substances that are used (during construction / operation) to cause new ground contamination issues on a site, for example introducing / changing the source of contamination
- impacts associated with re-use of soils and waste soils, for example, re-use of site-sourced materials on-site or offsite, disposal of site-sourced materials offsite, importation of materials to the site, etc.

Waste

The applicant should demonstrate compliance with the waste hierarchy (e.g. with respect to re-use, recycling or recovery and disposal).

For wastes arising from the development the ES should assess:

- the implications and wider environmental and public health impacts of different waste disposal options
- disposal route(s) and transport method(s) and how potential impacts on public health will be mitigated

If the development includes wastes delivered to the installation:

- Consider issues associated with waste delivery and acceptance procedures (including delivery of prohibited wastes) and should assess potential off-site impacts and describe their mitigation

Other aspects

Within the ES, PHE would expect to see information about how the applicant would respond to accidents with potential off-site emissions (e.g., flooding or fires, spills, leaks or releases off-site). Assessment of accidents should: identify all potential hazards in relation to construction, operation and decommissioning; include an assessment of the risks posed; and identify risk management measures and contingency actions that will be employed in the event of an accident in order to mitigate off-site effects.

PHE would expect the applicant to consider the COMAH Regulations (Control of Major Accident Hazards) and the Major Accident Off-Site Emergency Plan (Management of Waste from Extractive Industries) (England and Wales) Regulations: both in terms of their applicability to the development itself, and the development's potential to impact on, or be impacted by, any nearby installations themselves subject to these Regulations.

There is evidence that, in some cases, perception of risk may have a greater impact on health than the hazard itself. A 2009 report[8], jointly published by Liverpool John Moores University and the Health Protection Agency (HPA), examined health risk perception and environmental problems using a number of case studies. As a point to consider, the report suggested: "*Estimation of community anxiety and stress should be included as part of every risk or impact assessment of proposed plans that involve a potential environmental hazard. This is true even when the physical health risks may be negligible*." PHE supports the inclusion of this information within ES' as good practice.

Electromagnetic fields (EMF)

This advice relates to electrical installations such as substations and connecting underground cables or overhead lines. PHE advice on the health effects of power frequency electric and magnetic fields is available on the Gov.UK website.[9]

[8] Available from: [redacted]

[9] https://www.gov.uk/government/collections/electromagnetic-fields#low-frequency-electric-and-magnetic-fields

There is a potential health impact associated with the electric and magnetic fields around substations, overhead power lines and underground cables. The field strengths tend to reduce with distance from such equipment.

The following information provides a framework for considering the health impact associated with the electric and magnetic fields produced by the proposed development, including the direct and indirect effects of the electric and magnetic fields as indicated above.

Policy Measures for the Electricity Industry

A voluntary code of practice is published which sets out key principles for complying with the ICNIRP guidelines.[10]
Companion codes of practice dealing with optimum phasing of high voltage power lines and aspects of the guidelines that relate to indirect effects are also available.[11],[12]

Exposure Guidelines

PHE recommends the adoption in the UK of the EMF exposure guidelines published by the International Commission on Non-ionizing Radiation Protection (ICNIRP). Formal advice to this effect, based on an accompanying comprehensive review of the scientific evidence, was published in 2004 by the National Radiological Protection Board (NRPB), one of PHE's predecessor organisations[13]
Updates to the ICNIRP guidelines for static fields have been issued in 2009 and for low frequency fields in 2010. However, Government policy is that the ICNIRP guidelines are implemented as expressed in the 1999 EU Council Recommendation on limiting exposure of the general public (1999/519/EC):[14]

Static magnetic fields

For static magnetic fields, the ICNIRP guidelines published in 2009 recommend that acute exposure of the general public should not exceed 400 mT (millitesla), for any part of the body, although the previously recommended value of 40 mT is the value used in the Council Recommendation. However, because of potential indirect adverse effects, ICNIRP recognises that practical policies need to be implemented to prevent inadvertent harmful exposure of people with implanted electronic medical devices and implants containing ferromagnetic materials, and injuries due to flying ferromagnetic objects, and these considerations can lead to much lower restrictions, such as 0.5 mT.

Power frequency electric and magnetic fields

At 50 Hz, the known direct effects include those of induced currents in the body on the central nervous system (CNS) and indirect effects include the risk of painful spark discharge on contact with metal objects exposed to electric fields. The ICNIRP guidelines published in 1998 give reference levels for public exposure to 50 Hz electric and magnetic fields, and these are respectively 5 kV m^{-1} (kilovolts per metre) and 100 μT (microtesla). The reference level for magnetic fields changes to 200 μT in the revised (ICNIRP 2010) guidelines because of new basic restrictions based on induced electric fields inside the body, rather than induced current density. If people are not exposed to field strengths above these levels, direct effects on the CNS should be avoided and indirect effects such as the risk of painful spark discharge will be small. The reference levels are not in themselves limits but provide

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[10] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/37447/1256-code-practice-emf-public-exp-guidelines.pdf
[11] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/48309/1255-code-practice-optimum-phasing-power-lines.pdf
[12] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/224766/powerlines_vcop_microshocks.pdf
[13] http://webarchive.nationalarchives.gov.uk/20140629102627/http://www.hpa.org.uk/Publications/Radiation/NPRBArchive/DocumentsOfTheNRPB/Absd1502/
[14] http://webarchive.nationalarchives.gov.uk/+/www.dh.gov.uk/en/Publichealth/Healthprotection/DH_4089500

guidance for assessing compliance with underlying basic restrictions and reducing the risk of indirect effects.

Long term effects

There is concern about the possible effects of long-term exposure to electromagnetic fields, including possible carcinogenic effects at levels much lower than those given in the ICNIRP guidelines. In the NRPB advice issued in 2004, it was concluded that the studies that suggest health effects, including those concerning childhood leukaemia, could not be used to derive quantitative guidance on restricting exposure. However, the results of these studies represented uncertainty in the underlying evidence base, and taken together with people's concerns, provided a basis for providing an additional recommendation for Government to consider the need for further precautionary measures, particularly with respect to the exposure of children to power frequency magnetic fields.

The Stakeholder Advisory Group on ELF EMFs (SAGE)

The Stakeholders Advisory Group on ELF EMF's (SAGE) was set up to explore the implications for a precautionary approach to extremely low frequency electric and magnetic fields (ELF EMFs), and to make practical recommendations to Government:[15]
Relevant here is SAGE's 2007 First Interim Assessment, which makes several recommendations concerning high voltage power lines. Government supported the implementation of low cost options such as optimal phasing to reduce exposure; however it did not support the option of creating corridors around power lines in which development would be restricted on health grounds, which was considered to be a disproportionate measure given the evidence base on the potential long term health risks arising from exposure. The Government response to SAGE's First Interim Assessment is available on the national archive website.[16]
The Government also supported calls for providing more information on power frequency electric and magnetic fields, which is available on the PHE web pages.

Ionising radiation

Particular considerations apply when an application involves the possibility of exposure to ionising radiation. In such cases it is important that the basic principles of radiation protection recommended by the International Commission on Radiological Protection[17] (ICRP) are followed. PHE provides advice on the application of these recommendations in the UK. The ICRP recommendations are implemented in the Euratom Basic Safety Standards[18] (BSS) and these form the basis for UK legislation, including the Ionising Radiation Regulations 1999, the Radioactive Substances Act 1993, and the Environmental Permitting Regulations 2016.

As part of the EIA process PHE expects applicants to carry out the necessary radiological impact assessments to demonstrate compliance with UK legislation and the principles of radiation protection. This should be set out clearly in a separate section or report and should not require any further analysis by PHE. In particular, the important principles of justification, optimisation and radiation dose limitation should be addressed. In addition compliance with the Euratom BSS and UK legislation should be clear.

When considering the radiological impact of routine discharges of radionuclides to the environment PHE would, as part of the EIA process, expect to see a full radiation dose assessment considering both individual and collective (population) doses for the public and, where necessary, workers. For individual doses, consideration should be given to those members of the public who are likely to

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15 [redacted]

16 http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_107124

17 These recommendations are given in publications of the ICRP notably publications 90 and 103 see the website at [redacted]

18 Council Directive 96/29/EURATOM laying down basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionising radiation.

receive the highest exposures (referred to as the representative person, which is equivalent to the previous term, critical group).

Different age groups should be considered as appropriate and should normally include adults, 1 year old and 10 year old children. In particular situations doses to the fetus should also be calculated[19].

The estimated doses to the representative person should be compared to the appropriate radiation dose criteria (dose constraints and dose limits), taking account of other releases of radionuclides from nearby locations as appropriate. Collective doses should also be considered for the UK, European and world populations where appropriate.

The methods for assessing individual and collective radiation doses should follow the guidance given in 'Principles for the Assessment of Prospective Public Doses arising from Authorised Discharges of Radioactive Waste to the Environment August 2012 [20]

It is important that the methods used in any radiological dose assessment are clear and that key parameter values and assumptions are given (for example, the location of the representative persons, habit data and models used in the assessment).

Any radiological impact assessment, undertaken as part of the EIA, should also consider the possibility of short-term planned releases and the potential for accidental releases of radionuclides to the environment. This can be done by referring to compliance with the Ionising Radiation Regulations and other relevant legislation and guidance.

The radiological impact of any solid waste storage and disposal should also be addressed in the assessment to ensure that this complies with UK practice and legislation; information should be provided on the category of waste involved (e.g. very low level waste, VLLW). It is also important that the radiological impact associated with the decommissioning of the site is addressed.

Of relevance here is PHE advice on radiological criteria and assessments for land-based solid waste disposal facilities[21]. PHE advises that assessments of radiological impact during the operational phase should be performed in the same way as for any site authorised to discharge radioactive waste. PHE also advises that assessments of radiological impact during the post operational phase of the facility should consider long timescales (possibly in excess of 10,000 years) that are appropriate to the long-lived nature of the radionuclides in the waste, some of which may have half-lives of millions of years.

The radiological assessment should consider exposure of members of hypothetical representative groups for a number of scenarios including the expected migration of radionuclides from the facility, and inadvertent intrusion into the facility once institutional control has ceased.

For scenarios where the probability of occurrence can be estimated, both doses and health risks should be presented, where the health risk is the product of the probability that the scenario occurs, the dose if the scenario occurs and the health risk corresponding to unit dose.

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[19] HPA (2008) Guidance on the application of dose coefficients for the embryo, fetus and breastfed infant in dose assessments for members of the public. Doc HPA, RCE-5, 1-78, available at https://www.gov.uk/government/publications/embryo-fetus-and-breastfed-infant-application-of-dose-coefficients

[20] The Environment Agency (EA), Scottish Environment Protection Agency (SEPA), Northern Ireland Environment Agency, Health Protection Agency and the Food Standards Agency (FSA).
Principles for the Assessment of Prospective Public Doses arising from Authorised Discharges of Radioactive Waste to the Environment August 2012.
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/296390/geho1202bklh-e-e.pdf

[21] HPA RCE-8, Radiological Protection Objectives for the Land-based Disposal of Solid Radioactive Wastes, February 2009

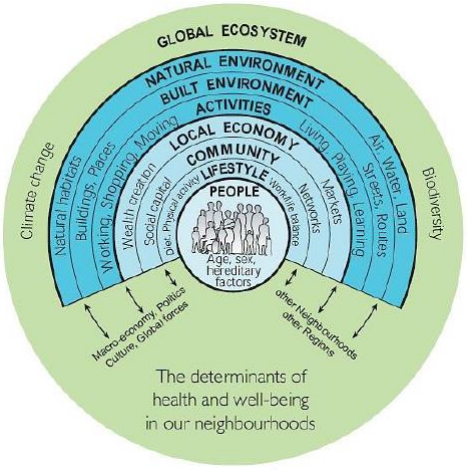
For inadvertent intrusion, the dose if the intrusion occurs should be presented. It is recommended that the post-closure phase be considered as a series of timescales, with the approach changing from more quantitative to more qualitative as times further in the future are considered.

The level of detail and sophistication in the modelling should also reflect the level of hazard presented by the waste. The uncertainty due to the long timescales means that the concept of collective dose has very limited use, although estimates of collective dose from the 'expected' migration scenario can be used to compare the relatively early impacts from some disposal options if required.

Wider Determinants of Health

World Health Organization (WHO's) defines health as "a state of complete physical, mental and social well-being and not merely an absence of disease or infirmity" (WHO, 1948).

The health of an individual or a population is the result of a complex interaction of a wide range of different determinants of health, from an individual's genetic make-up, to lifestyles and behaviours, and the communities, local economy, built and natural environments to global ecosystem trends. All developments will have some effect on the determinants of health, which in turn will influence the health and wellbeing of the general population, vulnerable groups and individual people.



Barton and Grant[22]

PHE recognises that evaluating an NSIP's impacts on health through the wider determinants is more complex than assessing a project's direct impacts against clearly defined regulatory protections (e.g. protected species). However, this does not mean that their assessment should be side-lined; with the 2017 EIA Regulations clarifying that the likely significant effects of a development proposal on human health must be assessed.

We accept that the relevance of these topics and associated impacts will vary depending on the nature of the proposed development and in order to assist applicants PHE has focused its approach on scoping determinants of health and wellbeing under four themes, which have been derived from an analysis of the wider determinants of health mentioned in the National Policy Statements. PHE has developed a list of 21 determinants of health and wellbeing under four broad themes, which have been derived from an analysis of the wider determinants of health mentioned in the National Policy Statements (NPS). If the applicant proposes to scope any areas out of the assessment, they should provide clear reasoning and justification.

The four themes are:

- Access

[22] Barton H, Grant M. A health map for the local human habitat. The Journal of the Royal Society for the Promotion of Health 2006; 126(6): 252-3.

- Traffic and Transport
- Socioeconomic
- Land Use

Methodology

PHE will expect assessments to set out the methodology used to assess each determinant included in the scope of the assessment. In some instances, the methodologies described may be established and refer to existing standards and/or guidance. In other instances, there may be no pre-defined methodology, which can often be the case for the wider determinants of health; as such there should be an application of a logical impact assessment method that:

- identifies effected populations vulnerable to impacts from the relevant determinant
- establishes the current baseline situation
- identifies the NSIP's potential direct and indirect impacts on each population
- if impacts are identified, evaluates whether the potential impact is significant in relation to the affected population
- identifies appropriate mitigation to minimise impacts or the subsequent effects on health
- identifies opportunities to achieve benefits from the scheme
- identifies appropriate monitoring programmes

Currently there is no standard methodology for assessing the population and human health effects of infrastructure projects, but a number of guides exist, including:

- Institute of Environmental Management and Assessment, 2017: Health in Environmental Assessment, a primer for a proportionate approach;
- NHS London Healthy Urban Development Unit (HUDU), 2015. Healthy Urban Planning Checklist and Rapid Health Impact Assessment Tool;
- Wales Health Impact Assessment Unit, 2012: HIA a practical guide;
- National Mental Wellbeing Impact Assessment Development Unit 2011: Mental Wellbeing Impact Assessment Toolkit;

Determining significant effects

Neither the EIA regulations nor the National Policy Statements provide a definition of what constitutes a 'significant' effect, and so PHE have derived a list of factors which it will take into consideration in the assessment of significance of effects, as outlined below. these list of factors should be read in conjunction with guidance from the above guides.

1. Sensitivity:

Is the population exposed to the NSIP at particular risk from effects on this determinant due to pre-existing vulnerabilities or inequalities (for example, are there high numbers in the local population of people who are young, older, with disabilities or long-term conditions, or on a low income)? Will the NSIP widen existing inequalities or introduce new inequalities in relation to this determinant?

2. Magnitude:

How likely is the impact on this determinant to occur? If likely, will the impact affect a large number of people / Will the impact affect a large geographic extent? Will the effects be frequent or continuous? Will the effects be temporary or permanent and irreversible?

3. Cumulative effects:

Will the NSIP's impacts on this determinant combine with effects from other existing or proposed NSIPs or large-scale developments in the area, resulting in an overall cumulative effect different to that of the project alone?
What are the cumulative effects of the impacts of the scheme on communities or populations. Individual impacts individually may not be significant but in combination may produce an overall significant effect.

4. Importance:

Is there evidence for the NSIP's effect on this determinant on health? Is the impact on this determinant important in the context of national, regional or local policy?

5. Acceptability:

What is the local community's level of acceptance of the NSIP in relation to this determinant? Do the local community have confidence that the applicants will promote positive health impacts and mitigate against negative health effects?

6. Opportunity for mitigation:

If this determinant is included in the scope for the EIA is there an opportunity to enhance any positive health impacts and/or mitigate any negative health impacts?

Scoping

The scoping report may determine that some of the wider determinants considered under human and population health can be scoped out of the EIA. If that, should be the case, detailed rationale and supporting evidence for any such exclusions must be provided. PHE will expect an assessment to have considered all of the determinants listed in Table1 of Appendix 1 as a minimum.

Vulnerable groups

Certain parts of the population may experience disproportionate negative health effects as a result of a development. Vulnerable populations can be identified through research literature, local population health data or from the identification of pre-existing health conditions that increase vulnerability.

The on health and wellbeing and health inequalities of the scheme will have particular effect on vulnerable or disadvantaged populations, including those that fall within the list of protected characteristics. Some protected groups are more likely to have elevated vulnerability associated with social and economic disadvantages. Consideration should be given to language or lifestyles that influence how certain populations are affected by impacts of the proposal, for example non-English speakers may face barriers to accessing information about the works or expressing their concerns.

Equality Impact Assessments (EqIA) are used to identify disproportionate effects on Protected Groups (defined by the Equality Act, 2010), including health effects. The assessments and findings of the Environmental Statement and the EqIA should be crossed reference between the two documents, particularly to ensure the assessment of potential impacts for health and inequalities and that resulting mitigation measures are mutually supportive.

The Wales Health Impact Assessment Support Unit (WHIASU), provides a suggested list of vulnerable groups

Age related groups
- Children and young people
- Older people

Income related groups
- People on low income
- Economically inactive
- Unemployed/workless
- People who are unable to work due to ill health

Groups who suffer discrimination or other social disadvantage
- People with physical or learning disabilities/difficulties
- Refugee groups
- People seeking asylum
- Travellers
- Single parent families
- Lesbian and gay and transgender people

• Black and minority ethnic groups
• Religious groups

Geographical groups
• People living in areas known to exhibit poor economic and/or health indicators
• People living in isolated/over-populated areas
• People unable to access services and facilities

Mental health

PHE supports the use of the broad definition of health proposed by the World Health Organisation (WHO). Mental well-being is fundamental to achieving a healthy, resilient and thriving population. It und4erpins healthy lifestyles, physical health, educational attainment, employment and productivity, relationships, community safety and cohesion and quality of life. NSIP schemes can be of such scale and nature that will impact on the over-arching protective factors, which are:
• Enhancing control
• Increasing resilience and community assets
• Facilitating participation and promoting inclusion.

There should be parity between mental and physical health, and any assessment of health impact should include the appreciation of both. A systematic approach to the assessment of the impacts on mental health, including suicide, is required. The **Mental Well-being Impact Assessment (MWIA)** could be used as a methodology. The assessment should identify vulnerable populations and provide clear mitigation strategies that are adequately linked to any local services or assets

Perceptions about the proposed scheme may increase the risk of anxiety or health effects by perceived effects. "Estimation of community anxiety and stress should be included as part of every risk or impact assessment of proposed plans that involve a potential environmental hazard.

Evidence base and baseline data

An assessment should be evidence based, using published literature to identify determinants and likely health effects. The strength of evidence identifying health effects can vary, but where the evidence for an association is weak it should not automatically be discounted.

There will be a range of publicly available health data including:

- National datasets such as those from the Office of National Statistics,
- Public Health England (PHE), including the fingertips data sets,
- Non-governmental organisations,
- Local public health reports, such as the Joint Strategic Needs Assessment, Health and Wellbeing Strategies;
- Consultation with local authorities, including local authority public health teams;
- Information received through public consultations

Mitigation

If the assessment has identified that significant negative effects are likely to occur with respect to the wider determinants of health, the assessment should include a description of planned mitigation measures the applicant will implement to avoid or prevent effects on the population.

Mitigation and/or monitoring proposals should be logical, feasible and have a clear governance and accountability framework indicating who will be responsible for implementation and how this will be secured during the construction and/or operation of the NSIP.

Positive benefits from the scheme

The scale of many NSIP developments will generate the potential for positive impacts on health and wellbeing; however, delivering such positive health outcomes often requires specific enabling or enhancement measures. For example, the construction of a new road network to access an NSIP site may provide an opportunity to improve the active transport infrastructure for the local

community. PHE expects developments to consider and report on the opportunity and feasibility of positive impacts. These may be stand alone or be considered as part of the mitigation measures.

Monitoring

PHE expects an assessment to include consideration of the need for monitoring. It may be appropriate to undertake monitoring where:

- Critical assumptions have been made
- There is uncertainty about whether negative impacts are likely to occur as it may be appropriate to include planned monitoring measures to track whether impacts do occur.
- There is uncertainty about the potential success of mitigation measures
- It is necessary to track the nature of the impact and provide useful and timely feedback that would allow action to be taken should negative impacts occur

How to contact PHE

If you wish to contact us regarding an existing or potential NSIP application please email: nsipconsultations@phe.gov.uk

Appendix 1

Table 1 – Wider determinants of health and wellbeing

Health and wellbeing themes			
Access	Traffic and Transport	Socioeconomic	Land Use
Wider determinants of health and wellbeing			
Access to : • local public and key services and facilities. • Good quality affordable housing. • Healthy affordable food. • The natural environment. • The natural environment within the urban environment. • Leisure, recreation and physical activities within the urban and natural environments.	• Accessibility. • Access to/by public transport. • Opportunities for access by cycling and walking. • Links between communities. • Community severance. • Connections to jobs. • Connections to services, facilities and leisure opportunities.	• Employment opportunities, including training opportunities. • Local business activity. • Regeneration. • Tourism and leisure industries. • Community/social cohesions and access to social networks. • Community engagement.	• Land use in urban and/or /rural settings. • Quality of Urban and natural environments

1) **Access**

a. Access to local, public and key services and facilities

Access to local facilities can increase mobility and social participation. Body mass index is significantly associated with access to facilities, including factors such as the mix and density of facilities in the area. The distance to facilities has no or only a small effect on walking and other physical activities. Access to recreational facilities can increase physical activity, especially walking for recreation, reduce body weight, reduce the risk of high blood pressure, and reduce the number of vehicle trips, the distances travelled and greenhouse gas emissions.

Local services include health and social care, education, employment, and leisure and recreation. Local facilities include community centres, shops, banks/credit unions and Post Offices. Services and facilities can be operated by the public, private and/or voluntary sectors. Access to services and facilities is important to both physical and mental health and wellbeing. Access is affected by factors such as availability,

proximity to people's place of residence, existence of transport services or active travel infrastructure to the location of services and facilities, and the quality of services and facilities.

The construction or operation of an NSIP can affect access adversely: it may increase demand and therefore reduce availability for the existing community; during construction, physical accessibility may be reduced due to increased traffic and/or the blockage of or changes to certain travel routes. It is also possible that some local services and facilities are lost due to the land-take needed for the NSIP.

Conversely if new routes are built or new services or facilities provided the NSIP may increase access. NSIPs relating to utilities such as energy and water can maintain, secure or increase access to those utilities, and thereby support health and wellbeing.

b. Access to good-quality affordable housing

Housing refurbishment can lead to an improvement in general health and reduce health inequalities. Housing improvements may also benefit mental health. The provision of diverse forms and types of housing is associated with increased physical activity. The provision of affordable housing is strongly associated with improved safety perceptions in the neighbourhood, particularly among people from low-income groups. For vulnerable groups, the provision of affordable housing can lead to improvements in social, behavioural and health related outcomes. For some people with long term conditions, the provision of secure and affordable housing can increase engagement with healthcare services, which can lead to improved health-related outcomes. The provision of secure and affordable housing can also reduce engagement in risky health-related behaviours. For people who are homeless, the provision of affordable housing increases engagement with healthcare services, improves quality of life and increases employment, and contributes to improving mental health.

Access to housing meets a basic human need, although housing of itself is not necessarily sufficient to support health and wellbeing: it is also important that the housing is of good quality and affordable. Factors affecting the quality of housing include energy efficiency (eg effective heating, insulation), sanitation and hygiene (eg toilet and bathroom), indoor air quality including ventilation and the presence of damp and/or mould, resilience to climate change, and overcrowding. The affordability of housing is important because for many people, especially people on a low income, housing will be the largest monthly expense; if the cost of housing is high, people may not be able to meet other needs such as the need for heating in winter or food. Some proposals for NSIPs include the provision of housing, which could be beneficial for the health and wellbeing of the local population. It is also possible that some housing will be subject to a compulsory purchase order due to the land-take needed for an NSIP.

c. Access to affordable healthy food

Access to healthy food is related to the provision of public and active transport infrastructure and the location and proximity of outlets selling healthier food such as fruit and vegetables. For the general population, increased access to healthy, affordable food through a variety of outlets (shops, supermarkets, farmers' markets and community gardens) is associated with improved dietary behaviours, including attitudes towards healthy eating and food purchasing behaviour, and improved adult weight. Increased access to unhealthier food retail outlets is associated with increased weight in the general population and increased obesity and unhealthy eating behaviours among children living in low-income areas. Urban agriculture can improve attitudes towards healthier food and increase fruit and vegetable consumption.

Factors affecting access to healthy affordable food include whether it is readily available from local shops, supermarkets, markets or delivery schemes and/or there are opportunities to grow food in local allotments or community gardens. People in environments where there is a high proportion of fast food outlets may not have easy access to healthy affordable food.

d. Access to the natural environment

Availability of and access to safe open green space is associated with increased physical activity across a variety of behaviours, social connectedness, childhood development, reduced risk of overweight and obesity and improved physical and mental health outcomes. While the quantity of green space in a neighbourhood helps to promote physical activity and is beneficial to physical health, eg lower rates of mortality from cardiovascular disease and respiratory disease in men, the availability of green environments is likely to contribute more to mental health than to physical health: the prevalence of some disease clusters, particularly anxiety and depression, is lower in living environments which have more green space within a 1-km radius.

The proximity, size, type, quality, distribution, density and context of green space are also important factors. Quality of green space may be a better predictor of health than quantity, and any type of green space in a neighbourhood does not necessarily act as a venue for, or will encourage, physical activity. 'Walkable' green environments are important for better health, and streetscape greenery is as strongly related to self-reported health as green areas. Residents in deprived areas are more likely to perceive access to green space as difficult, to report poorer safety, to visit the green space less frequently and to have lower levels of physical activity. The benefits to health and wellbeing of blue space include lower psychological distress.

The natural environment includes the landscape, waterscape and seascape. Factors affecting access include the proximity of the natural environment to people’s place of residence, the existence of public transport services or active travel infrastructure to the natural environment, the quality of the natural environment and feelings of safety in the natural environment. The construction of an NSIP may be an opportunity to provide green and/or blue infrastructure in the local area. It is also possible that green or blue infrastructure will be lost due to the land-take needed for the NSIP.

e. Access to the natural environment within the urban environment

Public open spaces are key elements of the built environment. Ecosystem services through the provision of green infrastructure are as important as other types of urban infrastructure, supporting physical, psychological and social health, although the quality and accessibility of green space affects its use, C19, ethnicity and perceptions of safety. Safe parks may be particularly important for promoting physical activity among urban adolescents. Proximity to urban green space and an increased proportion of green space are associated with decreased treatment of anxiety/mood disorders, the benefits deriving from both participation in usable green space near to home and observable green space in the neighbourhood. Urban agriculture may increase opportunities for physical activity and social connections.

A view of 'greenery' or of the sea moderates the annoyance response to noise. Water is associated with positive perceptive experiences in urban environments, with benefits for health such as enhanced contemplation, emotional bonding, participation and physical activity. Increasing biodiversity in urban environments, however, may promote the introduction of vector or host organisms for infectious pathogens, eg green connectivity may potentiate the role of rats and ticks in the spread of disease, and bodies of water may provide habitats for mosquitoes. Owing to economic growth,

population size and urban and industrial expansion in the EU, to maintain ecosystem services at 2010 levels, for every additional percentage increase in the proportion of 'artificial' land, there needs to be a 2.2% increase in green infrastructure.

The natural environment within the urban environment includes the provision of green space and blue space in towns and cities. Factors involved in access include the proximity of the green and/or blue space to people's place of residence, the existence of transport services or active travel infrastructure to the green and/or blue space, the quality of the green and/or blue space and feelings of safety when using the green and/or blue space. The construction of an NSIP may be an opportunity to provide green and/or blue infrastructure in the local urban environment. It is also possible that green or blue infrastructure in the urban environment will be lost due to the land-take needed for the NSIP.

f. Access to leisure, recreation and physical activity opportunities within the urban and natural environments.

Access to recreational opportunities, facilities and services is associated with risk factors for long-term disease; it can increase physical activity, especially walking for recreation, reduce body mass index and overweight and obesity, reduce the risk of high blood pressure, and reduce the number of vehicle trips, the distances travelled and greenhouse gas emissions. It can also enhance social connectedness. Children tend to play on light-traffic streets, whereas outdoor activities are less common on high-traffic streets. A perception of air pollution can be a barrier to participating in outdoor physical activity. There is a positive association between urban agriculture and increased opportunities for physical activity and social connectivity. Gardening in an allotment setting can result in many positive physical and mental health-related outcomes. Exercising in the natural environment can have a positive effect on mental wellbeing when compared with exercising indoors.

Leisure and recreation opportunities include opportunities that are both formal, such as belonging to a sports club, and informal, such as walking in the local park or wood. Physical activity opportunities include routine activity as part of daily life, such as walking or cycling to work, and activity as part of leisure or recreation, such as playing football. The construction of an NSIP may enhance the opportunities available for leisure and recreation and physical activity through the provision of new or improved travel routes, community infrastructure and/or green or blue space. Conversely, construction may reduce access through the disruption of travel routes to leisure, recreation and physical activity opportunities.

2) **Traffic and Transport**

a. Accessibility

Walkability, regional accessibility, pavements and bike facilities are positively associated with physical activity and negatively related to body weight and high blood pressure, and reduce the number of vehicle trips, the distances travelled and greenhouse gas emissions. Body mass index is associated with street network accessibility and slope variability.

Accessibility in relation to transport and travel has several aspects including whether potential users can gain physical access to the infrastructure and access to the services the infrastructure provides. The design and operation of transport infrastructure and the associated services should take account of the travel needs of all potential users including people with limited mobility. People whose specific needs should be considered include pregnant women, older people, children and young

people and people with a disability. Other aspects of transport infrastructure affecting accessibility include safety and affordability, both of which will affect people's ability to travel to places of employment and/or key local services and facilities and/or access their social networks.

b. Access to / by public transport

Provision of high-quality public transport is associated with higher levels of active travel among children and among people commuting to work, with a decrease in the use of private cars. Combining public transport with other forms of active travel can improve cardiovascular fitness. Innovative or new public transport interventions may need to be marketed and promoted differently to different groups of transport users, eg by emphasising novelty to car users while ensuring that the new system is seen by existing users as coherently integrated with existing services.

Transport facilitates access to other services, facilities and amenities important to health and wellbeing. Public transport is any transport open to members of the public including bus, rail and taxi services operated by the public, private or community sectors. For people who do not have access to private transport, access to public transport is important as the main agency of travel especially for journeys >1 mile. Access to public transport is not sufficient, however, and access by public transport needs to be taken into account: public transport services should link places where people live with the destinations they need or want to visit such as places of employment, education and healthcare, shops, banks and leisure facilities. Other aspects of access to public transport include affordability, safety, frequency and reliability of services.

c. Opportunities for / access by cycling & walking

Walking and cycling infrastructure can enhance street connectivity, helping to reduce perceptions of long-distance trips and providing alternative routes for active travel. Prioritising pedestrians and cyclists through changes in physical infrastructure can have positive behavioural and health outcomes, such as physical activity, mobility and cardiovascular outcomes. The provision and proximity of active transport infrastructure is also related to other long-term disease risk factors, such as access to healthy food, social connectedness and air quality. The perception of air pollution, however, appears to be a barrier to participating in active travel.

Perceived or objective danger may also have an adverse effect on cycling and walking, both of which activities decrease with increasing traffic volume and speed, and cycling for leisure decreases as local traffic density increases. Health gains from active travel policies outweigh the adverse effects of road traffic incidents. New infrastructure to promote cycling, walking and the use of public transport can increase the time spent cycling on the commute to work, and the overall time spent commuting among the least-active people. Active travel to work or school can be associated with body mass index and weight, and may reduce cardiovascular risk factors and improve cardiovascular outcomes. The distance of services from cycle paths can have an adverse effect on cycling behaviour, whereas mixed land use, higher densities and reduced distances to non-residential destinations promote transportation walking.

d. Links between communities

Social connectedness can be enhanced by the provision of public and active transport infrastructure and the location of employment, amenities, facilities and services.

e. Community severance

In neighbourhoods with high volumes of traffic, the likelihood of people knowing and trusting neighbours is reduced.

f. Connections to jobs

The location of employment opportunities and the provision of public and active transportation infrastructure are associated with risk factors for long-term disease such as physical activity. Good pedestrian and cycling infrastructure can promote commuting physical activity. Improved transport infrastructure has the potential to shift the population distribution of physical activity in relation to commuting, although a prerequisite may be a supportive social environment. Mixed land use, higher densities and reduced distances to non-residential destinations promote transportation walking.

The ease of access to employment, shops and services including the provision of public and active transport are important considerations and schemes should take any opportunity to improve infrastructure to promote cycling, walking and the use of public transport

g. Connections to services, facilities and leisure opportunities

Mixed land use, higher densities and reduced distances to non-residential destinations promote transportation walking. Access to recreational opportunities and the location of shops and services are associated with risk factors for long-term disease such as physical activity, access to healthy food and social connectedness. Increased distance of services from cycle paths can have an adverse effect on cycling behaviour.

3) **Socio Economic**

a. Employment opportunities including training opportunities

Employment is generally good for physical and mental health and well-being, and worklessness is associated with poorer physical and mental health and well-being. Work can be therapeutic and can reverse the adverse health effects of unemployment for healthy people of working age, many disabled people, most people with common health problems and social security beneficiaries. Account must be taken of the nature and quality of work and its social context and jobs should be safe and accommodating. Overall, the beneficial effects of work outweigh the risks of work and are greater than the harmful effects of long-term unemployment or prolonged sickness absence. Employment has a protective effect on depression and general mental health.

Transitions from unemployment to paid employment can reduce the risk of distress and improve mental health, whereas transitions into unemployment are psychologically distressing and detrimental to mental health. The mental health benefits of becoming employed are also dependent on the psychosocial quality of the job, including level of control, demands, complexity, job insecurity and level of pay: transition from unemployment to a high-quality job is good for mental health, whereas transition from unemployment to a low-quality job is worse for mental health than being unemployed. For people receiving social benefits, entry into paid employment can improve quality of life and self-rated health (physical, mental, social) within a short time-frame. For people receiving disability benefits, transition into employment can improve mental and physical health. For people with mental health needs, entry into employment reduces the use of mental health services.

For vocational rehabilitation of people with severe mental illness (SMI), Supported Employment is more effective than Pre-vocational Training in helping clients obtain

competitive employment; moreover, clients in Supported Employment earn more and work more hours per month than those in Pre-vocational Training.

b. Local Business Activity

It is important to demonstrate how a proposed development will contribute to ensuring the vitality of town centres. Schemes should consider the impact on local employment, promote beneficial competition within and between town centres, and create attractive, diverse places where people want to live, visit and work

In rural areas the applicant should assess the impact of the proposals on a prosperous rural economy, demonstrate how they will support the sustainable growth and expansion of all types of business and enterprise in rural areas, promoting the development and diversification of agricultural and other land based rural businesses.

c. Regeneration

Following rebuilding and housing improvements in deprived neighbourhoods, better housing conditions are associated with better health behaviours; allowing people to remain in their neighbourhood during demolition and rebuilding is more likely to stimulate life-changing improvements in health behaviour than in people who are relocated. The partial demolition of neighbourhoods does not appear to affect residents' physical or mental health. Mega-events, such as the Olympic Games, often promoted on the basis of their potential legacy for regeneration, appear to have only a short-term impact on mental health.

d. Tourism and Leisure Industries

The applicant should assess the impact of the proposed development on retail, leisure, commercial, office, tourism, cultural, community and residential development needed in town centres. In rural locations assessment and evaluation of potential impacts on sustainable rural tourism and leisure developments that benefit businesses in rural areas, communities and visitors should be undertaken.

e. Community / social cohesion and access to social networks

The location of employment, shops and services, provision of public and active transport infrastructure and access to open space and recreational opportunities are associated with social connectedness. Access to local amenities can increase social participation. Neighbourhoods that are more walkable can increase social capital. Urban agriculture can increase opportunities for social connectivity. Infrastructure developments, however, can affect the quality of life of communities living in the vicinity, mediated by substantial community change, including feelings of threat and anxiety, which can lead to psychosocial stress and intra-community conflict.

f. Community engagement

Public participation can improve environmental impact assessments, thereby increasing the total welfare of different interest groups in the community. Infrastructure development may be more acceptable to communities if it involves substantial public participation.

4) **Land Use**

a. Land use in urban and / or rural settings

Land-use mix including infrastructure:

Land use affects health not only by shaping the built environment, but also through the balance of various types of infrastructure including transport. Vulnerable groups in the population are disproportionately affected by decisions about land use, transport and the built environment. Land use and transport policies can result in negative health impacts due to low physical activity levels, sedentary behaviours, road traffic incidents, social isolation, air pollution, noise and heat. Mixed land use can increase both active travel and physical activity. Transportation walking is related to land-use mix, density and distance to non-residential destinations; recreational walking is related to density and mixed use. Using modelling, if land-use density and diversity are increased, there is a shift from motorised transport to cycling, walking and the use of public transport with consequent health gain from a reduction in long-term conditions including diabetes, cardiovascular disease and respiratory disease.

Proximity to infrastructure:
Energy resource activities relating to oil, gas and coal production and nuclear power can have a range of negative effects on children and young people. Residing in proximity to motorway infrastructure can reduce physical activity. For residents in proximity to rail infrastructure, annoyance is mediated by concern about damage to their property and future levels of vibration. Rural communities have concerns about competing with unconventional gas mining for land and water for both the local population and their livestock."

b. Quality of urban and natural environments

Long-term conditions such as cardiovascular disease, diabetes, obesity, asthma and depression can be moderated by the built environment. People in neighbourhoods characterised by high ‘walkability’ walk more than people in neighbourhoods with low ‘walkability’ irrespective of the land-use mix. In neighbourhoods associated with high ‘walkability’ there is an increase in physical activity and social capital, a reduction in overweight and blood pressure, and fewer reports of depression and of alcohol abuse. The presence of walkable land uses, rather than their equal mixture, relates to a healthy weight. Transportation walking is at its highest levels in neighbourhoods where the land-use mix includes residential, retail, office, health, welfare and community, and entertainment, culture and recreation land uses; recreational walking is at its highest levels when the land-use mix includes public open space, sporting infrastructure and primary and rural land uses. Reduced levels of pollution and street connectivity increase participation in physical activity.

Good-quality street lighting and traffic calming can increase pedestrian activity, while traffic calming reduces the risk of pedestrian injury. 20-mph zones and limits are effective at reducing the incidence of road traffic incidents and injuries, while good-quality street lighting may prevent them. Public open spaces within neighbourhoods encourage physical activity, although the physical activity is dependent on different aspects of open space, such as proximity, size and quality. Improving the quality of urban green spaces and parks can increase visitation and physical activity levels.

Living in a neighbourhood overlooking public areas can improve mental health, and residential greenness can reduce the risk of cardiovascular mortality. Crime and safety issues in a neighbourhood affect both health status and mental health. Despite the complexity of the relationship, the presence of green space has a positive effect on crime, and general environmental improvements may reduce the fear of crime. Trees can have a cooling effect on the environment – an urban park is cooler than a non-green site. Linking road infrastructure planning and green infrastructure planning can produce improved outcomes for both, including meeting local communities' landscape sustainability objectives.

Redcar & Cleveland Borough Council
Corporate Directorate for Growth, Enterprise and Environment
Development Management
Redcar and Cleveland House
Kirkleatham Street
Redcar
TS10 1RT

Email: planning_admin@redcar-cleveland.gov.uk
www.redcar-cleveland.gov.uk/Planning
Direct line [redacted]

DRAX POWER LIMITED

Our Ref: R/2021/0055/DCO
Your Ref:
Contact: Mrs J Parry
Date: 28 January 2021

Dear Sir/Madam

PROPOSAL: **APPLICATION FOR AN ORDER GRANTING DEVELOPMENT CONSENT FOR DRAX BIOENERGY WITH CARBON CAPTURE AND STORAGE PROJECT**
LOCATION: **DRAX POWER STATION**
APPLICANT: **DRAX POWER LIMITED**

Thank you for your consultation received on **20 January 2021**.

I would advise that having considered the detail of the application, we have no comments to make at this point in time.

Yours faithfully

Mrs J Parry
Planning Technical Officer

From:	[redacted]
To:	DraxBECCS
Cc:	Planning Administration
Subject:	EN010120 - Proposed Drax Bioenergy with Carbon Capture and Storage Project (BECCS) - EIA Scoping Notification and Consultation 12/2906/AAC
Date:	20 January 2021 12:08:55
Attachments:	image001.png image003.png image004.png image005.png image006.jpg

This document was classified as: OFFICIAL

I can confirm that the Stockton borough council have no comments to make on the proposal.

Elaine Atkinson
Principal Planning Officer
Stockton-on-Tees Borough Council

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The Coal Authority
Resolving the impacts of mining

200 Lichfield Lane
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NG18 4RG
T: [redacted]
E: planningconsultation@coal.gov.uk
www.gov.uk/coalauthority

For the attention of: Ms A Down
EIA Advisor
on behalf of the Secretary of State

[By email: DraxBECCS@planninginspectorate.gov.uk]

20 January 2021

Dear Ms Down

Your Reference: EN010120

Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) – Regulations 10 and 11

Application by Drax Power Limited (the Applicant) for an Order granting Development Consent for the Drax Bioenergy with Carbon Capture and Storage Project (the Proposed Development)

Scoping consultation and notification of the Applicant's contact details and duty to make available information to the Applicant if requested

Thank you for your notification of 19 January 2021 on behalf of the applicant seeking which relevant matters should be 'Scoped In' to any forthcoming Environmental Statement for the above site.

I have reviewed the plans (Figure 1.1 of the Environmental Impact Assessment Scoping Report, Revision: 01, January 2021) against our coal mining information and can confirm that, whilst the site falls within the coalfield, it is located outside the defined Development High Risk Area; meaning that there are no recorded coal mining legacy hazards at shallow depth that could pose a risk to land stability for surface development.

Accordingly, if the application is EIA development, there is no requirement for the applicant to consider coal mining legacy as part of their Environmental Impact Assessment.

I hope that this is helpful however please do not hesitate to contact me if you wish to discuss this matter further.

Yours sincerely

Deb Roberts *M.Sc. MRTPI*
Planning & Development Manager

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Yorkshire Water Services Ltd
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For telephone enquiries ring:
on

Environmental Services
Central Operations
Temple Quay House
2 The Square
Bristol
BS1 6PN

Your Ref: EN010120-000019-210119
Our Ref: X001747

4th February 2021

Dear Sir/Madam,

Draw Power Limited, Drax - EIA Scoping Opinion - Drax Bioenergy with Carbon Capture and Storage

Thank you for consulting Yorkshire Water regarding the above proposed development. We have the following comments:

Protection of infrastructure

There is a considerable amount of water supply and, to a lesser extent, sewerage, infrastructure located within the site boundary and its presence must be reflected in the site layout. It is likely that diversion and/or protection measures will be required to ensure that the public water supply and sewerage networks are not adversely impacted.

For further information regarding protection of infrastructure, the developer should contact:

Water mains- tech.support.engineer.north@yorkshirewater.co.uk

Sewerage- Developer Services Team: telephone 0345 120 84 82 (option 1) or email t echnical.sewerage@yorkshirewater.co.uk

Waste Water

I note from the Scoping Report that the developer will be providing a Flood Risk Assessment to support the EIA. The FRA should include a robust surface water management plan that follows sustainable drainage principles.

Yours faithfully

Stephanie Walden
Land Use Planning Manager