NORTH LINCOLNSHIRE GREEN ENERGY PARK

Planning Act 2008

Infrastructure Planning (Applications Prescribed Forms and Procedure) Regulations 2009

North Lincolnshire Green Energy Park

Volume 9

9.18 Applicants Further Responses to Written Questions (ExAQ1)

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Appendices

Acronyms and Abbreviations

Name	Description
AGI	Above Ground Installations
CBMF	Concrete Block Manufacturing Facility
CCUS	Carbon Capture, Utilisation and Storage
CO2	Carbon Dioxide
CoCP	Code of Construction Practice
COMAH	Control of Major Accident Hazards
DAS	Design and Access Statement
dDCO	Draft Development Consent Order
DHPWN	District Heat and Private Wire Networks
EIA	Environmental Impact Assessment
ERF	Energy Recovery Facility
ES	Environmental Statement
EV	Electric Vehicle
ExA	Examining Authority
H_2	Hydrogen
IEMA	Institute of Environmental Management and Assessment
LAQM	Local Air Quality Management
MW	Megawatt
NE	Natural England
NLC	North Lincolnshire Council
NLGEP	North Lincolnshire Green Energy Park
NSIP	Nationally Significant Infrastructure Project
OEMP	Outline Environmental Management Plan
PRF	Plastic Recycling Facility
RDF	Refuse Derived Fuel
RHTF	Residue Handling and Treatment Facility
SMP	Soil Management Plan
SSSI	Site of Special Scientific Interest
SUDs	Sustainable Drainage System

1. INTRODUCTION

1.1 Overview

1.1.1 This report provides further responses to the Examining Authority's (ExA) written questions, issued on 23 November 2022 where responses were deferred to Deadline 3.

1.2 The Proposed Development

1.2.1 The North Lincolnshire Green Energy Park (NLGEP), located at Flixborough, North Lincolnshire, comprises an ERF capable of converting up to 760,000 tonnes of residual non-recyclable waste into 95 MW of electricity and a CCUS facility which will treat a proportion of the excess gasses released from the ERF to remove and store CO2 prior to emission into the atmosphere. The design of the ERF and CCUS will also enable future connection into the Zero Carbon Humber pipeline to be applied for, when this is consented and operational, to enable the possibility of full carbon capture in the future.

1.2.2 The NSIP incorporates a switchyard, to ensure that the power created can be exported to the National Grid or to local businesses, and a water treatment facility, to take water from the mains supply or recycled process water to remove impurities and make it suitable for use in the boilers, the CCUS facility, concrete block manufacture, hydrogen production and the maintenance of the water levels in the wetland area.

1.2.3 The Project will include the following Associated Development to support the operation of the NSIP:

- A bottom ash and flue gas residue handling and treatment facility (RHTF);
- A concrete block manufacturing facility (CBMF);
- A plastic recycling facility (PRF);
- A hydrogen production and storage facility;
- An electric vehicle (EV) and hydrogen (H2) refuelling station;
- Battery storage;
- A hydrogen and natural gas above ground installations (AGI);
- A new access road and parking;
- A gatehouse and visitor centre with elevated walkway;

- Railway reinstatement works including, sidings by Dragonby, reinstatement and safety improvements to the 6km private railway spur, and the construction of a new railhead with sidings south of Flixborough Wharf;
- A northern and southern district heating and private wire network (DHPWN);
- Habitat creation, landscaping and ecological mitigation, including green infrastructure and 65-acre wetland area;
- New public rights of way and cycle ways including footbridges;
- Sustainable Drainage Systems (SuDS) and flood defence; and,
- Utility constructions and diversions.

1.2.4 Additional information regarding the proposed development can be found in Chapter 1 and Chapter 3 of the submitted Environmental Statement (APP-049 and APP-051).

1.3 Structure of the Responses to Written Questions

1.3.1 This report has been structured to set out clearly all questions where a response was deferred, the Applicants initial response to this at Deadline 2, and the subsequent response at Deadline 3.

1.3.2 The responses are set out in the form of a table in section 2.

2. FURTHER RESPONSES TO EXAMINING AUTHORITY WRITTEN QUESTIONS (EXAQ1)

EXQ1	QUESTION	APPLICANT'S INITIAL RESPONSE	APPLICANT'S SUBSEQUENT RESPONSE
Q1.0.2	Project Areas The Non-Technical Summary [APP-048] at Figure 3 provides a plan showing project areas, subdividing the DCO land to aid clarity within the ES. (ii) In paragraph 1.3.1.13 of APP-042 the Railway Reinstatement Land appears to go beyond the area identified in Figure 3 and this description appears more consistent with paragraph 2.5.1.2 of [APP-051] Project Description. Please clarify the position and any implications for the ES. (iii) Please provide a Plan based on an up-to-date Ordnance Survey of the Project Areas used as a	(ii) Paragraph 1.3.1.13 of APP-042 and paragraph 2.5.1.2 of APP-051 are describing the railway line as opposed to the element of the Project defined as the 'Railway Reinstatement Land'. There are no implications to the ES, as this doesn't change the assessment of effects, just how they are presented. The Applicant will carry out a thorough review of the ES as to whether there are any other chapters which take this approach and provide any updates at Deadline 3 as necessary.	The Applicant has made a review of the ES as to which chapters refer to the Application Land in terms of dividing it up into four areas: Energy Park Land, the Northern DHPWN land, Southern DHPWN Land and Railway Reinstatement Land. Several chapters use these as a point of reference, namely: • Non-technical Summary (REP2-020); • Project Description and Alternatives (APP-051); • Noise (APP-055) to a limited extent; • Ground Conditions, Contamination and Hydrogeology (APP-097); • Water Resources and Flood Risk (APP-057); • Ecology and Nature Conservation (APP-058); • Landscape and Visual Impact (APP-059); and • Archaeology and Cultural Heritage (APP-060). In all instances the distinctions were made in order to facilitate for the reader a spatial understanding of the relationship between baseline features and different aspects of the Project and have no material bearing ion the technical impact assessment, commitments to mitigation and the means of securing the mitigation.
Q1.0.7	**Cross referencing within documents** ii) [APP-042] Doc 5.8 Consents and Licenses – Table 2.1, item 25 Please advise where Table 4.1 in the Design	(ii) This was an erroneous reference carried forward in error from an earlier draft. The Applicant will provide a comparison of the substances on Site with the thresholds in the Hazardous Substances Regulations at Deadline 3.	The Applicant has considered the materials which will be present on the Project site (in storage, within the processes or both) listed in: • Schedule 1 of the Control of Major Accident Hazards Regulations 2015; and

EXQ1	QUESTION	APPLICANT'S INITIAL RESPONSE	APPLICANT'S SUBSEQUENT RESPONSE
	and Access Statement can be found or provide a corrected reference.		• Schedule 1 of the Planning (Hazardous Substances) Regulations 2015. The table at Appendix C to this document lists those materials that will be on the site that appear in the respective schedules and compares their quantities with the relevant thresholds. Some further clarification is required on two matters but at this stage it appears that the Project will not be a COMAH Upper or Lower Tier site and will not require Hazardous Substances Consent.
Q1.0.8	**Glossary of Terms and Bibliography** (v) The Application relies upon many referenced documents that are external to the Application. Can the Applicant submit a bibliography of all external reference documents, and a copy of any that are not publicly available, for inclusion in the examination library at the first available deadline.	(v) The Applicant can confirm that they will provide a bibliography of external reference documents for inclusion in the examination library at Deadline 3.	A bibliography of external reference documents has been submitted as part of Deadline 3 (Document Reference 9.19). Where referenced documents are not available via hyperlink these have been submitted at this deadline also.
Q1.0.20	**The Environment Act** The Environment Act passed into law on 9 November 2021. While many of its provisions await detail and implementation, does this have any implications for the application	The Applicant has checked all provisions now in force in the Environment Act (2021) and is in the process of confirming any implications for the Proposed Development. It is intended that the Applicant will provide a more complete response to this question at Deadline 3	A summary of the implications of the provisions of the Environment Act is contained in Appendix A to this document.

EXQ1	QUESTION	APPLICANT'S INITIAL RESPONSE	APPLICANT'S SUBSEQUENT RESPONSE
	documentation submitted for the Proposed Development?	(12th January 2023) to allow time to fully consider each relevant provision, but notes that many of these provisions will have been taken into account in the submitted Application as they came into force in January 2022.	
Q1.0.27	**Land Reinstatement Policy** Can the Applicant confirm where the Land Reinstatement Policy, referenced at e-page 77 of the Code of Construction Plan [APP-074], can be found?	This reference was erroneously carried forward from an earlier draft and should have referred to the Soil Management Plan (an outline of which is provided in [APP-074]). Please note that similar erroneous references occur in [APP-067] (e-page 56) and [APP-062] (paragraph 7.2.1.3, e-pages 61 and 62). The Applicant will review the Outline SMP [APP-074] and ensure that it adequately covers soil reinstatement and submit an updated version, if necessary, at Deadline 3.	The Outline Soil Management Plan has been reviewed as set out in the Deadline 2 response to Q1.0.27. Minor updates have been made to the Outline SMP to ensure that it adequately covers soil reinstatement and this is submitted as Appendix J of the revised CoCP (epage 138). For clarity a clean and tracked version of the revised document has been provided.
Q1.0.28	**Working Hours** Paragraph 6.1.1.6 of ES Chapter 3 [APP-051] states that working hours would be 07:00-19:00 and that there would be no working during night-time hours of 23:00-07:00 except with specific agreement of North Lincolnshire Council (NLC) and/or in the event of an emergency. This is stipulated in the CoCP [APP-074].	The Applicant agrees that agreement with NLC would be required for evening works (between 19:00 and 23:00) on weekdays as well as nighttime works. The CoCP [AS-011] will be amended accordingly and submitted at Deadline 3.	The CoCP has been amended as set out in the Deadline 2 response. The revised CoCP has been submitted at Deadline 3. For clarity a clean and tracked version of the revised document has been provided.

EXQ1	QUESTION	APPLICANT'S INITIAL RESPONSE	APPLICANT'S SUBSEQUENT RESPONSE
	(i) Can the Applicant confirm whether agreement with NLC would be required for any works between 19:00-23:00?		
Q1.0.31	**Code of Construction Practice** The ES Annex 7 6.3.7 [APP-074] Code of Construction Practice normally describes how it is intended to control adverse effects during construction. Could the Applicant explain why their intentions with respect to core construction working hours have not been set out?	The Applicant proposes that the core construction hours will be: • 07:00 to 19:00 on weekdays (excluding public holidays); and • 07:00 to 13:00 on Saturdays. These hours align with the noise assessment [APP-055] which in turn followed the significance criteria set out in Table E.1, Annex E of BS5228 Code of Practice for noise and vibration control on construction and open sites - Part 1: Noise. The CoCP (AS-011) will be amended accordingly and submitted at Deadline 3.	The CoCP has been amended as set out in the Deadline 2 response. The revised CoCP has been submitted at Deadline 3. For clarity a clean and tracked version of the revised document has been provided.
Q2.0.2	**Agricultural Land Classification (ALC) and loss of Best and Most Versatile (BMV) land** Natural England advise that some Grade 1 land has not been identified in the south/south west of the application site and is not shown on Figure 9 of ES Chapter 14 [APP-062] (ii) It has generally been the case that a significant effect would	(ii) Based on the above exercise, the Applicant will revisit the assessment of the effects, also taking into consideration the new IEMA guidance (A New Perspective on Land and Soil in Environmental Impact Assessment' published in February 2022). The Applicant anticipates that this information will be provided at Deadline 3.	The Applicant has looked into this further and is undertaking the following key actions and intends to respond at Deadline 4 with a further response: 1. The Applicant is revising the assessment in accordance with the IEMA guidance which wasn't available at the time that the assessment was undertaken. 2. The Applicant has reviewed the accuracy of the figures presented in ES Chapter 14 [APP-

EXQ1	QUESTION	APPLICANT'S INITIAL RESPONSE	APPLICANT'S SUBSEQUENT RESPONSE
	be the loss of >20ha BMV, and this is considered major magnitude in the IEMA guidance (Table 3). ES Chapter 14 confirms the permanent loss of approx. 36ha agricultural land. Could the Applicant consider whether there is scope to reduce this adverse impact?		062] on permanent loss of BMV (Best and Most Versatile) agricultural land. The initial review is indicating that the figures presented in the ES Chapter are an underestimate of the BMV land to be permanently lost as a result of the Proposed Development. This is principally as a result of the assumptions made with regard to the ability to continue to use the new wetland areas for agricultural purposes. The Applicant is therefore testing this position more thoroughly so that an accurate figure can be provided to the ExA. 3. The permanent loss of BMV land as a result of buildings, hardstanding and roads is just under 11 hectares. The vast majority of BMV loss is therefore as a result of the newly created planting for screening, wetland areas and habitats, which are being provided to deliver 10% Biodiversity Net Gain (BNG). 4. In this context, it is important to explain that the BNG calculation includes all of the existing agricultural land within the red line boundary which is to be retained in agricultural use. This artificially reduces the percentage of BNG being delivered by the Proposed Development, however, the Applicant has discussed this in detail with Natural England and their position is that this land must be included for the purpose of the BNG metric. 5. Noting the ExA's request as to whether the permanent loss of BMV agricultural land can be reduced, the Applicant is reconsidering the proposed BNG areas and whether they could be redesigned to reduce the amount of BMV land taken. It should be noted in carrying out

EXQ1	QUESTION	APPLICANT'S INITIAL RESPONSE	APPLICANT'S SUBSEQUENT RESPONSE
			this exercise that the likely effect would be that the Proposed Development would deliver less than 10% BNG using Natural England's Metric. 6. Natural England are requesting that the delivery of the BNG of at least 10% is provided for within the DCO. Although 60% of the BNG is provided for using non-agricultural land and existing areas such as the Lysaughts Drain, the wetlands area provides a significant BNG contribution. The Applicant is reviewing how the BMV land take could be reduced without sacrificing the BNG status. The Applicant wants to ensure that it undertakes this further work before responding further to the ExA and will report back as soon as the work has been undertaken, in consultation with Natural England.
Q2.0.3	**ALC** NE states that the 'Agricultural Land Classification detailed Post 1988 ALC survey, Scunthorpe, Glanford Business Park (ALCL00890)' figure does not cover the whole application site. (i) It is not clear which parts of the application site are not covered by the figure please could this be clarified and Figure updated/provided as appropriate.	(i) The Applicant thanks NE for drawing attention to this document. While it does not cover all the Application land it does cover a large part of it and provides better granularity on classification than the mapping resources used so far for the ES. The Applicant will take this fully into consideration in updating the assessment and make clear the extent of the Application Land that is covered by this particular mapping resource. An updated figure will be provided if required at Deadline 3.	NE has provided updated data which covers the vast majority of the site. As noted in its responses to Q2.0.2 and Q2.0.5, the Applicant is reviewing the position on agricultural land following the provision of this updated data and will provide a comprehensive response as soon as possible.

EXQ1	QUESTION	APPLICANT'S INITIAL RESPONSE	APPLICANT'S SUBSEQUENT RESPONSE
Q2.0.5	**Agricultural Land Area** Can a table be provided setting out the total area of land within the DCO, broken down by existing and proposed use by area.	As set out above an update to the assessment of effects on agricultural land will be provided at Deadline 3) and will include this requested information.	As noted in its response to Q2.0.2, the Applicant is reviewing the information provided by NE and will provide a table setting out the total area of agricultural land within the DCO, broken down by existing use and proposed use. This has not however been straightforward, given the discrepancies between the NE data and the data used to inform the ES chapter. The Applicant is therefore not able to provide this information as anticipated by Deadline 3, but will provide it as soon as possible and hopefully by Deadline 4.
Q7.0.20	**The scope and purpose of the Compulsory Acquisition Powers sought** To assist with the consideration of whether the extent of the land to be acquired is no more than is reasonably required for the purposes of the development to which the development consent will relate, ii) Explain the justification for the extinguishment of rights over such land.	The Applicant will be preparing a table detailing all of the Plots in which it is seeking compulsory acquisition of land interests and the purpose and justification for which the plot is required. This will be submitted at Deadline 3 and the Applicant hopes that this will assist the ExA's consideration of the Applicant's case for compulsory acquisition.	A document setting out the purpose for which compulsory acquisition and temporary possession powers are sought has been submitted as part of Deadline 3 (Document Reference 9.20).
Q8.0.2	**Ground Investigations** iii) If further reports are to be undertaken when can these be	(iii) No further reports are to be submitted, however for Deadline 3 the Applicant will provide a succinct up to date summary of the situation regarding	A note on the status of Ground Gas Monitoring is contained in Appendix B of this document.

EXQ1	QUESTION	APPLICANT'S INITIAL RESPONSE	APPLICANT'S SUBSEQUENT RESPONSE
	expected to be submitted into the Examination?	ground gas and whether this affects any ES conclusions.	
Q10.0.10	**Levels within the Site** Figure 5.24 of the DAS shows a section through Bellwin Drive which suggests a 2.4m difference in levels with a fence above. (i) Please provide a visualisation of this arrangement.	(i) A visualisation, similar to those within the DAS [APP-037] of the section referred to here will be produced and included within the updated DAS at Deadline 3.	The DAS has been amended as set out in the Deadline 2 response. The revised document has been submitted at Deadline 3. A schedule of post submission amendments has been included as Appendix A of the revised document for clarity.

APPENDIX A: THE ENVIRONMENT ACT 2021 AND ITS IMPLICATIONS FOR THE PROJECT

The Environment Act 2021 is the UK's new framework for environmental protection. Following the UK's exit from the EU, new laws relating to clean air, water resources and nature protection, together with other environmental protections, will be required to replace that which originally stemmed from EU Directives. The Environment Act 2021 (the Act) provides the framework for the UK to address certain environmental protections through new laws. It also sets out new powers in relation to such matters as setting new binding targets.

The Act has two main functions:

- to provide a legal framework for environmental governance in the UK; and
- to bring in measures aimed at improving the environment (mainly regarding waste and efficient use of resources; air quality; water resources; and biodiversity).

The majority of the Act is for regulators and has no direct implications for private organisations; however, subsequent legislation made under the Act will affect private organisations.

The Act is therefore a vehicle for a number of Department for Environment, Food and Rural Affairs' (Defra) different environmental policies, and sets out the legal framework for significant reforms to local authority waste and recycling services, as well as creating new statutory duties for local authorities on nature recovery.

The schedules contained in the Act will be come into force through a number of new regulations, only some of which are currently in force while many are pending.

Key aspects of the Act are summarised below.

Office of Environmental Protection: the Act establishes the Office of Environmental Protection (OEP) as an independent watchdog. The OEP will have enforcement powers over public bodies that fail to comply with environmental law, as well as powers to handle serious environmental complaints. It can issue notices to public authorities and there are powers in the Act for the OEP to apply for judicial review of public authorities where serious failure to comply with environmental law takes place.

Waste and Resource Efficiency: the Act addresses recycling and related matters in waste collection and management (e.g. domestic waste food collection). It also addresses and makes provision for enabling government to set product standards that address resource use efficiency, alongside related information and labelling requirements. Key aspects include the following.

- Producer responsibility: the relevant ministers in the countries of the UK may make regulations covering producer responsibility obligations, such as: to prevent a product or material becoming waste; reduce the proportion of a product or material becoming waste. They may also make regulations that require financial contribution from those involved in the supply chain of certain products or materials to the disposal costs. Other requirements on producers may be introduced such as providing certain information e.g.: the resource efficiency of their products; durability; repairability; and recyclability.
- Deposit schemes: the relevant ministers in the countries of the UK may make regulations covering deposit schemes whereby a person purchasing certain items pays a deposit which is refunded when that item is collected/returned.

- Single use items: the relevant ministers in the countries of the UK may make regulations which require sellers of goods or services to charge for single use items.
- Separation of waste: the Act introduces measures regarding the separation of waste (in England) through amendments to the Environmental Protection Act 1990.
- Waste tracking: the relevant ministers in the countries of the UK may make future regulations for the introduction of electronic waste tracking systems requiring anyone who imports, produces, keeps, treats, manages or disposes of waste to maintain electronic data records.
- Hazardous waste: the Environmental Protection Act 1990 is amended to allow the making of further regulations aimed at strengthening restrictions regarding hazardous waste.
- Import and export of waste: the Environmental Protection Act 1990 will be amended to allow the making of further regulations to prohibit or restrict waste imports and exports.

Relevance for the Applicant

These matters will have little direct relevance for the Applicant and the Development. Generally, they will support separation and collection of products and packaging at end of life and contribute to meeting the government's recycling targets. Achieving these targets is allowed for in the Applicant's RDF Supply Assessment. Certain measures may promote the separation of plastics for recycling, where the PRF contributes to the necessary provision of local and national infrastructure. Restrictions on waste exports may have the effect of increasing the quantity of residual waste requiring management within the UK beyond that modelled in the RDF Supply Assessment.

Air Quality: the Act will strengthen the powers of local authorities regarding air quality management and enforcement. The Act updates, simplifies and strengthens the established local air quality management framework (LAQM) approach. Much of this also relates to measures on road traffic emissions such as setting up clean air zones or similar.

The Act also includes amendments to the Clean Air Act (1993), simplifying the means for smoke control enforcement (including the giving of fines), together with additional enforcement powers for domestic burning and moored vessels.

The Secretary of State may also make regulations to allow for products (e.g. road vehicles) not meeting certain relevant environmental standards to be recalled.

Relevance for the Applicant

The operation of the Project will require an Environmental Permit under the Environmental Permitting (England and Wales) Regulations 2016. The Act has no material implications to the measures the Project will adopt to manage and control its emissions to air.

Water Resources: the majority of changes introduced by the Act will be made through amendments to the Water Industry Act 1991. The main ones are as follows.

- Resource management: water undertakers in (England and Wales) may be required to propose measures they can take as an industry to improve resource management and development of water resources in the future. The content of such proposals would be specified by Ministers, who would also be given powers to make regulations

requiring the industry to prepare and publish water resource management plans (including drought plans).

- Drainage and sewerage: sewerage undertakers will be required to prepare, publish and maintain drainage and sewerage management plans (under the Water Industry Act 1991).
- Stormwater overflows: the Act adds new requirements to the Water Industry Act 1991. These include requiring for the Secretary of State, Environment Agency and sewerage undertakers to reduce the incidences of stormwater overflows. Measures include the requirements to prepare stormwater overflow discharge reduction plans and publishing progress reports on the plans. Sewerage undertakers will also be required to report stormwater discharges and the effects they have on water quality.

Relevance for the Applicant

None of the provisions in the Act relating to water resources have any direct implications for the Applicant.

Nature and biodiversity: under the Act a new general condition will be added to the Town and Country Planning Act 1990 such that for applications for planning permission to be granted (in England) a biodiversity gain plan will need to be submitted and approved. Furthermore, Nationally Significant Infrastructure Projects will be required to improve the local ecology through a new biodiversity net gain requirement. This will be implemented through changes to the Planning Act 2008. These changes are yet to come into force.

Other changes under the Act include the following:

- Biodiversity net gain register: regulations may be made under the Act to for the establishment of a public register of biodiversity net gain sites, where a party has undertaken habitat enhancement work under a conservation covenant (or planning obligation) and is required to maintain the enhancement for at least 30 years.
- Biodiversity credits: under the Act the Secretary of State (in England) is given powers which would allow the setting up of a scheme that allowed biodiversity credits to be sold.
- Public authority duties: through an amendment to the Natural Environment and Rural Communities Act 2006, public authorities (in England) will be required to assess how they take action to conserve and enhance biodiversity, and some public authorities will be required to report on their actions.
- Local nature recovery strategies: the Act makes provision for local nature recovery strategies to be created and published by the relevant public authority for areas in England. The strategies must contain: a statement of biodiversity priorities; and a local habitat map.
- Species conservation strategies: under the Act Natural England will publish a strategy to improve the conservation status of certain species. Local planning authorities (or other specified public authorities) will be required to work alongside Natural England to prepare and implement these strategies.
- Protected site strategies: under the Act Natural England will publish protected site strategies aimed at improving their management and the conservation outcomes, and which also control and manage the effects of third-party plans and activities on the

management and conservation of a site. Protected sites include: European sites; sites of special scientific interest (SSSI); and marine conservation zones.

- Tree felling: the Act makes provisions for changes to the Highways Act 1980 placing requirements on highway authorities on the process they must take prior to felling a tree on a street or road.
- Use of forest risk commodities: forest risk commodities (i.e. agricultural commodities for which production is associated with large-scale conversion of land from natural forest to agricultural use) of concern will be specified in future regulations. The Act will determine the requirements for businesses using forest risk commodities in their UK commercial activities and aims to address illegal deforestation in supply chains.

Relevance for the Applicant

The Applicant is offering a net gain which is in excess of the accepted 10% metric, despite the fact that the Application Land includes areas of arable land and drainage ditches that will continue in their current use. As a result, this aspect of the Act (once it comes into force) has no implications for the Project and the Applicant understand that this view is shared by NLC and NE who both welcome the net gain proposals. No other biodiversity aspects of the Act have any material implications for the Applicant.

APPENDIX B: NOTE ON STATUS OF GROUND GAS MONITORING

Coverage of ground gas and monitoring in the ES

At the time of drafting EA Chapter 8 (Ground Conditions, Contamination and Hydrogeology, APP-097) the monitoring of ground gas was in the process of being completed and data had only been analysed for the first of eight rounds of monitoring as noted in paragraph 6.6.1.15 (e-page 34):

> "Ground gas monitoring is currently ongoing at the five monitoring well locations. Monitoring will be undertaken weekly for eight monitoring rounds. The first round of monitoring indicated that the methane and carbon dioxide concentrations at MW1 (proposed location of the polymer plant) were indicative of a Characteristic Situation 3 which may require gas protection measures."

By the time of submission, the eight rounds of monitoring had been completed and the analysis and reporting finalised. The report on Ground Gas Monitoring was then included at a late date as Appendix F to APP-097 but was not subsequently referenced within the chapter and nor were its conclusion pulled forward into the main body of the text which stated at paragraph 9.2.1.1 (e-pages 49 to 50):

> "Ground gas monitoring is currently ongoing on the Application Land as part of the SI. Preliminary results indicate that there may need to be some mitigation measures due to methane and carbon dioxide. Any necessary mitigation measures will be included in the detailed design once the ground gas monitoring has been completed."

Appendix F (Ground Gas Monitoring) to APP-097 concludes as follows (e-page 741):

> "4.1.1.1 Eight rounds of ground gas monitoring were undertaken at five locations (shallow and deep at each location) on the NLGEP Land between September and December 2021.
>
> 4.1.1.2 Based on the monitoring results, the majority of locations returned a gas characteristic scenario 1 (very low) indicative of natural ground with low organic content or 'typical' Made Ground.
>
> 4.1.1.3 MW8d has returned a CGS 2 (low), typical of natural soils with high organic content or "typical Made Ground".
>
> 4.1.1.4 At MW1d, the proposed site of the Polymer Plant, a GCS of 2 to 3 (medium) was calculated depending on the flow rate. It is likely that the elevated carbon dioxide and methane concentrations are due to the underlying peat layers in the superficial deposits.
>
> 4.1.1.5 Both CGS 2 and CGS 3 may require gas remedial measures incorporated into the project design. Therefore further gas monitoring and a gas detailed quantitative risk assessment (DQRA) is recommended to inform the detailed design of buildings in these areas.
>
> 4.1.1.6 Due to the Made Ground conditions it was not possible to install monitoring wells in the wharf area (northern NLGEP land) during the site investigation. Although concentrations of carbon dioxide and methane were low across the majority of locations, with the exception of MW1d and MW8d, the presence of peat layers across the NGELP do require further investigation once the footprints of the proposed development have been finalised."

Implications for ES Findings

The Code of Construction Practice (CoCP, AS-011, e-page 45) commits the Applicant to further monitoring and inclusion of protective measures in the design of any buildings in the area and to undertake site evaluation and risk assessment processes and the development of protective measures in accordance with BS8485:2015+A1:2019. This will be secured through the Construction Environmental Management Plan (DCO Requirement 4).

The Outline Operational Environmental Management Plan (Outline OEMP, APP-075, e-page 11) goes on to state the following.

> "In the event that ground gas protective measures are required in the design of any buildings, operational monitoring of ground gas would be required as part of system verification."

These measures are also secured through DCO Requirement 4.

The conclusions of the Ground Gas Monitoring Report (paragraph 4.1.1.6 above) make reference to further investigations needed for areas of 'made ground' in the port area. Should these further investigations reveal additional ground gas issues these would still be covered by the mitigation commitments contained in the CoCP and Outline OEMP.

There are therefore no implications to the overall EIA findings, the commitments contained in the ES, the CoCP and the Outline OEMP and the DCO Requirements.

APPENDIX C: COMPARISON OF SUBSTANCES ON SITE WITH THE RELEVANT THRESHOLDS

Substance	Mass stored on site (tonnes)	COMAH Lower threshold	COMAH Upper threshold	Comments
Ammonia	13.5 on a dry basis 67.5 as a 20% solution in water	100	200	Threshold given is for E1 (Acute Hazard to Aquatic Environment) for 20% Ammonia solution. For category E1 the HSC threshold is 100 tonnes.
Flue gas treatment residue	260			Insufficient information to confirm the COMAH dangerous substance category. This substance will contain heavy metals, as it is the residue from removing these substances from the ERF flue gas. Further work and certainty on waste composition is required to establish whether any individual metals or total quantities could exceed thresholds.
Diesel	190	2,500	25,000	Named COMAH dangerous substance thresholds. Not named in the HSC regulations. Considered a flammable substance therefore 5,000 tonne threshold applies.
Amine solvent (dry basis)	9.5			Not listed as a COMAH dangerous substance in itself. The solvent choice will depend on the technology provider selected. However, currently amines which are proposed by technology providers do not present any of the hazards outlined in the COMAH regulations. This will need to be assessed in detail when a technology provider has been selected and the required information is provided on the amine solvent to be supplied.
Hydrogen	1.2	5	50	Named COMAH dangerous substance thresholds. In the HSC regs, the threshold for hydrogen is given as 2 tonnes.