

# Immingham Green Energy Terminal

TR030008

9.30 Written Summaries of the Applicant's Oral Case at Issue Specific Hearing 2 with Appendices

March 2024

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Planning Inspectorate Scheme Ref: TR030008 Application Document Ref: TR030008/EXAM/9.30

#### 1 **ABOUT THIS DOCUMENT**

#### 1.1 Introduction

- 1.1.1 This document summarises the case put by Associated British Ports (the Applicant), at the Issue Specific Hearing 2 on 21 February 2024 for the Immingham Green Energy Terminal project (referred to as the project).
- 1.1.2 The hearing opened at 10:00 on 21 February 2024 and closed at 17:40 on 21 February 2024. The agenda for the hearing [EV3-001] was published on the Planning Inspectorate's website on 9 February 2024.
- 1.1.3 In what follows, the Applicant's submissions on the points raised broadly follow the items set out in the Examining Authority's agenda.

#### 1.2 **Attendees on behalf of the Applicant**

1.2.1 Hereward Phillpot KC, Counsel instructed jointly by Bryan Cave Leighton Paisner LLP (BCLP) and Charles Russell Speechlys (CRS), appeared on behalf of Associated British Ports, the Applicant.

#### 2 APPLICANT'S SUMMARY OF CASE ON ITEM 3: CONSTRUCTION EFFECTS

#### 2.1 **Item 3 (Construction Effects)**

Table 2.1 – Item 2 (Construction Effects)

Issue Discussed	Summary Of Oral Case
The construction programme, including the intended approach to the phasing of construction, commencement of operation and decommissioning and any influence market forces might have on timescales.	The Applicant continued its presentation from Issue Specific Hearing 1 with reference to the slides provided at Appendix A of this document. The Applicant's speaker notes for this topic area are provided at Appendix B of this document.
Explanation of the proposed construction timescales for all parts of the Proposed	NSIP Construction Programme



# Development, and what assumptions that have been made to inform these

The Applicant submitted that all of the construction works for the NSIP fall within Phase 1 of the project.

Initially, a scope of enabling works will be required. This will include planting of trees to compensate for those lost in the Long Strip (anticipated in Quarter 4 2024), establishing the offices and welfare facilities within the East Site (anticipated in Quarter 1 2025) and establishing a marine loadout facility within either the Port of Immingham or Grimsby (anticipated Quarter 2 2025).

The construction phasing outlined in the application is subject to a main works contractor being appointed, but generally consists of the following stages:

- 1. Tree clearance, topsoil removal and haul road construction to facilitate access to the river which is anticipated between Q1 to Q2 2025.
- 2. Construction of culverts to bridge the drainage ditches on the site in accordance with the drainage strategy which is anticipated between Q2 to Q3 2025.
- 3. Following completion of the haul road the river wall modifications will be completed around Q3 2025. The jetty approach ramp will then be constructed followed by the remaining access road works and landside pipe rack foundations between Q3 2025 and to Q2 2026.
- 4. In parallel to the landside works, two jack-up barges will be mobilised. The first jack-up barge will work from the jetty landfall into the river installing the access jetty piles between Q2 to Q4 2025. The second jack-up barge will work at the jetty head installing piles for the loading platform and dolphins between Q2 2025 and to Q1 2026.
- 5. Once the access jetty piles have progressed far enough into the river it is proposed that a crane barge will be mobilised to install the crossheads on top of piles, primary bridge beams between pile bents, and structural pipe racks for Air Products. The crane barge will work from landfall into the river. On completion of the access jetty substructure it will be demobilised. This is anticipated to happen between O2 2025 to O1 2026.
- 6. The insitu concrete access jetty roadway, on top of the primary beams, will be installed from land. This will facilitate safe and efficient delivery of insitu concrete along the sections of completed access jetty. This is anticipated to happen between Q4 2025 to Q3 2026.
- 7. On completion of the piling works the two jack-ups barges are then repurposed to install precast concrete and insitu concrete elements of both the jetty head structures and the dolphins. The insitu concrete component will be pumped down the partially completed access jetty. If



- programme requirements dictate maritime delivery of insitu concrete may also be required. This is anticipated to happen between Q1 to Q3 2026.
- 8. Fendering, quick release hooks, MLAs, and other quay furniture is then installed before the jackup barges are demobilised, which is anticipated to happen between Q3 to Q4 2026.
- 9. Dredging of the berth pocket will then be undertaken once all marine construction plant has been demobilised, which is anticipated to happen in Q3 2026.

#### **Terrestrial Construction Programme for Hydrogen Production Facility**

The Phase 1 scope also includes the main components of the hydrogen production facility sufficient to get it commissioned and operational. The timescale for phase 1 is well developed. Subsequent phases increase production capacity progressively and are much smaller in scope. The detailed timescale for subsequent phases is less developed.

The key components for Phase 1 are:

- Jetty topsides and above ground piping (work No 1, 2 and 4)
- Ammonia storage tanks and associated process and utility units (Work No 3)
- Underground pipeline corridor (Work No 6)
- Hydrogen Production Units (2x), Hydrogen liquefier, hydrogen storage and tanker loading, utilities, buildings, roads and site security (Work No 7)

The jetty topsides and above ground piping (work No 1, 2 and 4) is closely linked and interfaced with the jetty structure construction. Based on award of the detail design work in the next few months, piperack module installation will be Q2 2025 to Q1 2026, mechanical completion of the ammonia topsides is planned Q4 2026. The commissioning will be carried out in conjunction with the tank commissioning and is planned for Q2 2027

The ammonia storage tanks and associated process and utility units (Work No 3) is one of the two main project critical paths. Based on award of the EPC contract in February 24, completion of the tank and full ammonia storage area system is planned for Q2 2027.



The underground pipeline corridor (Work No 6) work will be completed as soon as possible after DCO approval, as the construction methodology will affect works on Work No 7. Mechanical completion is planned Q3 2025.

The hydrogen Production Units (2x), Hydrogen liquefier, hydrogen storage and tanker loading, utilities, buildings, roads and site security (Work No 7) sit on the second project critical path. It is planned that mechanical completion will be Q2 2027. Commissioning will follow after commissioning of the ammonia storage tanks and jetty topsides systems and is expected approx. Q4 2027.

In relation to the panel's question as to whether the phases could be brought forward quicker should the market demand come forward quicker, the Applicant explained that from a constructability perspective it would not be possible to build the hydrogen production facility in one phase as it would drive worker numbers, traffic and site congestion above tolerable levels. However, the phases subsequent to phase 1 are much smaller in nature and could be overlapped should this be necessary. The Applicant noted that phase 1 dominates all of the impacts and even if phases 2 to 6 were aggregated, the compression of these phases would still sit within the envelope of the assessment of the phase 1 impacts, so would not cause a lacuna in the assessment in this respect.

Overall approach toward mitigation of construction effects focusing on terrestrial based noise, air quality and emissions and construction traffic.

Explanation of how construction mitigation measures would be secured, along with how these would be managed and monitored.

In relation to the overall approach to assessing construction effects, the Applicant explained that an envelope of effects was assessed as well as the mitigation response to address that envelope of effects. As such, so long as the construction works sit within that ambit, there is no further need for any additional control because the control measures deal with the envelope of reasonable worst case effects rather than the effects that may eventually arise, which would be within the reasonable worst case envelope. In short, the envelope encapsulates all the effects that the Applicant anticipates will arise.

In relation to terrestrial noise, the oCEMP [APP-221] at table 4 of section 3 provides noise limits which will apply at the relevant noise sensitive receptors, NSR 1 and NSR 2 are the properties on Queens Road closest to Work No. 7 and NSR 3 and NS4 are the next closest residences so the noise limits will be the main control measure for these receptors and will be a powerful way of limiting construction noise. In addition, the construction working hours are addressed in draft requirement 9 of the draft DCO. Subparagraph 2 of requirement 9 provides for works to be undertaken outside of the permitted working hours only if thy do not give rise to any materially new or materially different effects than those assessed in the ES. This will give a further element of control in relation to noise.

In relation to air quality, and more specifically construction dust management, the oCEMP [APP-221] at table 3 of section 3 commits the contractor to developing a Dust Management Plan in accordance with the outline Dust Management Plan included as Appendix C of the oCEMP. In relation to air quality and emissions more generally, control measures are not proposed as there is no suggestion that there would



be any significant adverse effects in relation to emissions other than dust. However, within table 3 of section 3 there is best practice guidance to encourage the contractor to avoid unnecessary emissions.

In relation to how the Applicant plans to reduce carbon emissions more widely using embodied carbon within materials as an example, the Applicant referred to table 16 of the oCEMP [APP-221]. The table sets out the measures the Applicant proposes to take, which include prioritising sourcing recycled materials and using locally sourced products, re-using site won materials and switching off vehicles and plant when not in use. The Applicant confirmed that requirement 6 of the draft DCO requires the CEMP to be approved by NELC and this approval each time it is sought will be sought against best practice guidance at that time. Each phase of the project will also have its own final CEMP so there is opportunity to build in additional measures to reduce carbon emissions if necessary. Should NELC deem it necessary, further assessment information can be provided.

In relation to the temporary overnight road closures noted in paragraph 2.5.35 of chapter 2 of the ES [APP-044], the Applicant noted that this was raised in Q.1.14.4.1 of the ExA's First Written Questions [PD-006] to which a full written response will be provided at Deadline 1. However, in short the closures are to allow for temporary and permanent accesses to the site to be created as well as connections to services that are on the highway. These works will be managed by on street traffic management. The road closure for Work No. 4 will require advance notification to the local authority and local residents and this process will be secured through a requirement in the DCO and alternative route will be made available at all times for road users. The Applicant noted that the works, and as such, closures will occur predominantly in phase 1 of the project but there is the possibility that the Applicant needs to enter the highway during the other phases for service connections or access point finalisations. The Applicant noted that the appropriate traffic management is under discussion with NELC but there will need to be some elements left open for future discussion to allow for flexibility.

#### 3 APPLICANT'S SUMMARY OF CASE ON ITEM 4: CUMULATIVE EFFECTS

#### 3.1 **Item 4 (Cumulative Effects)**

Table 4.1 – Item 4 (Cumulative Effects)

Issue Discussed	Summary Of Oral Case



Discussion around the Applicant's approach towards cumulative effects and confirmation that both the long list and the short list are suitable.	The Examining Panel note that this item can be addressed through the Applicant's responses to the ExA's First Written Questions. As such, the Applicant made no submissions in relation to this agenda item.
Discussion of the cumulative effects of the proposed development with the Immingham East RoRo Terminal (IERRT)	The Applicant explained that three scenarios were assessed in terms of cumulative impact from the IERRT scheme. Firstly, that IERRT and IGET construction phases occur at the same time. Secondly, that IERRT is operational when the IGET construction phase commences and thirdly, that both projects are operational at the same time.
	The results of these assessments were that were no potential effects for landscape and visual, historic environment, nature conservation, ground conditions and land quality and major accidents and disasters. The only significant cumulative effects that could rise in relation to the projects are socio-economic which would accrue as large beneficial cumulative effects due to the construction of the projects with a series of other projects coming forward in the local area.
	In terms of cumulative traffic impacts, the Applicant explained that the operational traffic effects were scoped out of the environmental assessment as the traffic generation of the site is very modest when operational. This position has been agreed with National Highways and NELC. On IERRT the traffic impact during operation was the predominant impact, but during examination this was found to be acceptable in terms of traffic movements on the local network. In short, the impact of IGET on traffic is negligible to the point that it would not affect any outcome of the IERRT assessment so there is no adverse cumulative impact at all. In terms of traffic impact during construction, the Applicant referred to tables 11.25 and 11.26 to show that the cumulative impact of construction traffic is low and if the construction phases of the projects overlap, there would be even less of an impact than if the operational phases were to overlap.
Discussion of the potential for any cumulative effects, both during construction and operation of the Proposed Development with the proposed Viking Carbon Capture Storage Scheme.	The Applicant noted that the technical specialists that worked on the environmental impact assessment for Viking CCS also worked on the IGET proposals. As such, a meeting was recently held with these specialists with the view to prepare updated information that both project teams can rely on in examination in respect of the cumulative effects of both projects. The Applicant also confirmed that an updated cumulative assessment for Viking CCS will be submitted at Deadline 1 but in short, there are no new significant adverse effects than those already reported.



#### 4 APPLICANT'S SUMMARY OF CASE ON ITEM 5: MAJOR ACCIDENTS AND HAZARDOUS SUBSTANCES

#### 4.1 Item 5 (Major Accidents and Hazardous Substances)

Table 5.1 – Item 5 (Major Accidents and Hazardous Substances)

Issue Discussed	Summary Of Oral Case
How has the Applicant ensured that all scenarios that could lead to a major incident, have been captured and included as part of a quantitative risk assessment.	Consideration of individual major accident scenarios is regulated under the Control of Major Accident Hazard (COMAH) Regulations. The Applicant confirmed that in designing the facility and preparing the DCO application, an assessment of major accident and disaster scenarios was undertaken and reported in ES Chapter 22: Major Accidents and Disasters [APP-064]. These include credible hazard categories associated with process equipment failure, malfunction of equipment or instrumentation or similar, those items are detailed in table 22.4 of the ES Chapter. These could result in a release of toxic ammonia gas or flammable gas or liquid and these events are provided in table 22.5.
	Section 22.7 and 22.8 indicate the process safety studies that were completed; the majority of those are covered by quantified risk assessment (QRA) which was prepared to support the DCO Application and involved the modelling of a release of Ammonia or the release of Hydrogen, based on the release being at representative pressures and temperatures, for different credible hole sizes and locations. The QRA is not concerned with the individual possible causes of those releases, except where it considers the frequency with which a release may occur.
	However, these, and many other possible scenarios, were considered during the design of the facility, prior to submission of the DCO Application. The facility has been designed in order to meet Air Products' internal standards, but also to comply with the COMAH Regulations (which are an entirely separate regime from the infrastructure planning Hazardous Substance Consent regimes). Immingham Green Energy Terminal will be an "upper tier" facility under COMAH, and subject to the highest levels of safety regulation. The Competent Authority for COMAH is both the HSE and the Environment Agency.
	The COMAH Regulations require Air Products to undergo a number of steps including submission of a pre-construction and pre-occupation safety report, and the main COMAH report, which must be updated regularly and remains an 'evergreen' document throughout the life of the facility. The COMAH report is reviewed every 5 years whether there have been changes to the facility or not.



Underpinning the COMAH report is a series of studies and risk analyses. These studies are initially completed during the design of the facility but are also revised if anything is changed during the operating phase of the facility and some are reviewed at regular intervals to ensure that changing regulations are accounted for. There are four main studies, but many more reviews are undertaken:

- The first is the Consequence Analysis and Quantified Risk Analysis including Blast Analysis or Building Risk Analysis and Toxic Release Modelling. These studies are completed early in the design and these studies have been undertaken and were used as the basis for the DCO Application.
- The second is the Hazard and Operability review (HAZOP) this is a formal, internationally recognised type of safety study which splits the process into sections and uses set guidewords and parameters for a group of experts to assess the potential causes and worst case consequences of hazards associated with the design and operation of all parts of the process. The group assesses available safeguards to prevent or mitigate the consequences and makes recommendations to add further safeguards if the existing design is considered insufficient. The HAZOP can also include a 'Risk Matrix' which helps the group to assess whether the design meets the companies' or regulatory Risk Criteria. The first phases of the HAZOP have been completed, but the process continues throughout the design phase. This is the principal review which would pick up all of the scenarios asked.
- The third review is a Safety Integrity Level review (sometimes referred to as a SIL Assessment)

   again this is a formal, internationally recognised and regulated safety study which assesses the required reliability of safety systems used as safeguards in the design of a process. The safety systems identified are implemented in a separate system to the normal control system in order to be entirely independent and are regularly proof tested.
- The final review is the vent and emergency flare dispersion analysis which models the dispersion of vapour from controlled process vents and emergency vents or flares and ensures that they are located safely for both on site and off site risk to people. The model may include assessment of the dispersion of radiant heat and toxic or asphyxiant vapour, both in normal operation and at start up or shut down of the facility.

The last two studies are completed during the detailed design phase for the facility and so these are yet to be completed.



All of these studies obviously contain highly sensitive and confidential information and as such are not put into the public domain and not all of the details are required to be submitted as part of the COMAH documentation, but the COMAH documentation must prove that they have been completed.

The Applicant confirmed that the Examining Authority can have confidence that, as indicated in ES Chapter 22 [APP-064], all appropriate scenarios, their safeguards and mitigations, have been captured in a HAZOP or in a QRA. In any event, that is a matter that will also be considered by the HSE and EA under the COMAH Regulations.

What does the inherent risks posed by the handling and manufacture of toxic and highly flammable materials associated with the hydrogen production facility, mean for local residents? The Applicant explained that risks to residents are controlled by both the COMAH Regulations and under the Planning (Hazardous Substances) Regulations 2015 and the Planning (Hazardous Substances) Act 1990 (requiring a hazardous substance consent to be obtained for the hydrogen production facility). The Applicant emphasised that while these regulations ensure the safety of residents, it is also Air Products' own priority to ensure the safety of residents and its own employees.

As explained in Chapter 22 of the Environmental Statement, the HSE require that mitigation measures for risk events arising out of the handling and manufacture of toxic and flammable materials must reduce any risk to a level that is As Low As Reasonably Practicable, (ALARP).

Aside from the residential properties on Queens Road, in respect of which compulsory acquisition is proposed, the Applicant does not envisage that there will be any adverse impacts on local residents and their daily lives.

The Applicant confirmed that potential risks to the public have been carefully considered. In order to assess those risks, Air Products engaged an independent third party to carry out a Quantified Risk Assessment (QRA). The QRA process uses not just the consequences of a release, but also includes assessment of the potential frequency of different sorts of incidents and the mitigations that can be used to reduce that frequency or to mitigate the consequences. It also uses population data and weather conditions to determine overall risk to the public. It was the outcome of this QRA which was used as the basis of the DCO application.

In terms of hazardous substances, Air Products has applied to NELC for consent to store and handle ammonia and Hydrogen on the site. As a consultee on the application, the HSE will complete similar QRAs to assess the proposal against their Land Use Planning guidance.

The HSE Land Use Planning guidance divides the Risk Contours from a facility into 3 zones, termed Inner, Middle and Outer zones. The inner zone being where the greatest risk lies. The Port of Immingham already contains a number of operating facilities with hazardous substances and therefore



there are existing zones in place. The new zones are used to adjust those existing zones. The HSE then has guidance, based on sensitivity, for which populations are permitted in each of the zones. For example:

- No sensitivity level 4 populations are permitted in any of the zones, level 4 sensitivity
  populations are things like hospitals, nursing homes and schools and stadiums with large
  numbers of people.
- Indoor large public spaces such as retail and leisure centres or outdoor public spaces with between 100 and 1000 people at a time are only permitted in the outer zone.
- Residential areas of up to 30 houses at a density of no more than 40 homes per hectare and hotels of up to 100 beds or camping of up to 33 pitches are permitted in the outer and middle zones.
- Workplace buildings with fewer than 100 occupants and less than 3 occupied stories plus stand alone carparks for warehouses, factories and offices are permitted in all 3 zones.

The reference above to 'permitted' means that the HSE will not "advise against" this sort of development in these zones.

The Applicant explained that the HSE does not publish its own results and the resulting zones. However, the QRA completed by Air Products' independent experts, based on methodology understood to be used by the HSE, demonstrates that, on completion of the adjusted zones, the residential properties at Queens Road will lie within the Inner zone. It is for this reason that the request for Compulsory Acquisition of these residences is included in the DCO Application.

All other dwellings lie beyond the inner zone, and therefore it is not considered that the HSE will advise against the application.

The Applicant noted the Queens Road café and a few other commercial properties located in the Inner zone, however confirmed the Applicant's position that those businesses are compatible with the Land Use Planning zones.

In terms of future development of the area, there are a number of areas around the Port which have been allocated for development in the local plan. The proposed development types are all for employment rather than residential or healthcare etc. None of these development types are of a highly



	sensitive nature and so the Applicant does not expect the allocations to be impacted by the anticipated changes in the Land Use Planning zones.
Confirmation on progress and related timescales on measures required prior to the start of chemical commissioning and where these have been secured	The Applicant confirmed that it would need to have obtained its environmental permit for the installation prior to it becoming operational and that the application for the environmental permit is anticipated to be submitted in the next two months.
Does the dDCO, need to contain any conditions or restrictions to help manage the risks associated with the hydrogen production facility?	The Applicant reinforced the submission made by the Environment Agency that in the Health and Safety Executive's Relevant Representation [RR-011] at paragraph 17, they confirm that they would not expect the DCO to include additional matters relation to health and safety. This is consistent with the normal position that where you have existing statutory regimes, there is no need to duplicate.

#### 5 APPLICANT'S SUMMARY OF CASE ON ITEM 6: TRAFFIC AND TRANSPORT

#### 5.1 **Item 6 (Traffic and Transport)**

Table 6.1 – Item 6 (Traffic and Transport)

Issue Discussed	Summary Of Oral Case
Explanation of how potential traffic impacts have been modelled	The Applicant noted the principal impacts arising related to the construction phase of the development. In that regard , phase 1 is the main and highest period of activity, with subsequent phases 2 to 6 making up only a third of the traffic generation of phase 1Therefore, robustly Phase 1 is the period that has been tested for the environmental assessment of traffic generation and impacts.
	In terms of the modelling of landside HGV trip generation, the construction of phase one has been considered in its totality. Referring to Table 3 of the CTMP [APP-223], the Applicant explained that the quantities of all the required types of construction material derived from the design of the scheme were quantified into the number of HGVs trips would be required The trip generation for each type of material



were aggregated and then broken down into monthly, weekly and daily numbers of HGV trips, which equates to a total of 190 HGV trips (95 in and 95 out) daily.

The same process was adopted for the marine element of the works, with a total of 8 HGV trips daily being derived (Table 4 of [APP-223]). The Applicant noted, is because the bulk of the materials for the jetty construction will be arriving by sea. On that basis, the total number of daily HGV movements to and from the site during peak construction would be just under 200.

The Applicant explained that the construction workforce numbers were also modelled using Phase 1 as a worst case scenario. Worker numbers have been derived from assessment of construction requirements and labour hours required for different individual operations on the sites. The profile of workers on site is shown at plate A-1 [APP-223] which confirms construction workforce will a peak of up to 919 workers on site. On the marine side, the forecast is for a peak of 220 construction workers on site. Together, this results in the total number of construction workers at the peak of construction to just over 1100 workers. This drops significantly after the peak once the bulk of the civil works are complete.

In response to a question raised as regards the number of vehicles required to transport construction workers at the construction peak, the Applicant confirmed that each vehicle had an assumed car share ratio of 1.5 which would translate to 760 trips in and out of the site. Reference Para 11.8.4 and 11.8.5 of [APP-53] This excludes the proposal for the provision of minibuses which are also included in the Outline Construction Worker Travel Plan [APP-223] Appendix A Para 5.2.1).

In response to whether covid may have affected the traffic modelling undertaken, the Applicant confirmed that additional survey work was undertaken in 2023 which sought to validate the 2021 surveys. The 2021 surveys were undertaken when the UK was out of covid restrictions but the concern was that there would be less traffic than usual as the country re-adjusted to the 'new normal'. However, the 2023 survey showed that less traffic was on the network than what was surveyed in 2021. As such, the higher baseline in 2021 was adopted so that the assessment was robust. A full written response to this is provided in response to Q1.10.1.1

Explanation of how traffic will be managed in accordance with the street works and access plan, ensuring minimal disruption to road users.

The Applicant explained that there are 3 main elements to the works. The first is the construction of accesses, be it temporary for construction or permanent. The second is the provision of utilities either to cross the site or connect to facilities that are already in the public highway. The third element is the works related to temporary modification of some of Kings Road to accommodate abnormal loads. Full details of the expected closures are provided in the applicants response to O1.13.4.1



Management of abnormal indivisible loads in relation to Works No. 10	In terms of the process of managing these three elements, for the first element the accesses are all on the NELC highway so the Applicant will agree the construction details with them in due course, and this agreement is secured within a DCO requirement. A detailed traffic management scheme will also be approved and signed off by the contractor who will deliver the works. For the second element, a similar process would be followed but with an additional step of engaging with the relevant undertakers. For the third element, abnormal loads, these will be subject to the movement of overhead lines which will then be reinstated after the load has been moved. Prior to moving the abnormal loads, there is a separate process under a different statutory regime that requires notification and advertisement along the relevant highways – as set out in [APP-236], Point 12. As such, this is not secured within the draft DCO but is referenced in the consents and agreements position statement.
What enforcement measures to ensure drivers will only use designated routes, such as those for HGV vehicles	The proposed HGV route is the most obvious and attractive for HGV drivers so the general expectation is that it would be the preferred route. The Applicant made reference to section 2.5 of the Outline CTMP [APP-223] Para 2.7.2, which proposes that it will be a condition of contract between the Applicant and the appointed contractor, and therefore any appointed subcontractors, that they are made aware of the plan and routing. There is a process of training and induction to make sure that all drivers are aware of the requirement to follow the route. Should there be non-compliance with the route, there is a 'three strikes and you're out' policy within the Outline CTMP [APP-223] Para 2.7.2 which will be the responsibility of the contractor to enforce as part of their duties to the developer.
Potential traffic impacts on the volume of construction vehicle trips and capacity of the A180/A1173 junction	The Applicant confirmed that it is in discussions with National Highways in terms of modelling of the A180 / A1173 junction. The Applicant has provided National Highway with the assessment of the A180/A1173 junction including a junction operation model. The conclusions of that assessment show that change in flows as a result of the peak construction at phase 1 has no material impact on the operation of the junction and as such, the Applicant does not anticipate any adverse impacts, nor indeed any mitigation to be required.



#### 6 APPLICANT'S SUMMARY OF CASE ON ITEM 7: TERRESTRIAL ECOLOGY AND HABITATS REGULATION ASSESSMENT

#### 6.1 **Item 7 (Terrestrial Ecology and Habitats Regulation Assessment)**

Table 7.1 – Item 7 (Terrestrial Ecology and Habitats Regulation Assessment)

Issue Discussed	Summary Of Oral Case
Update on Bat Emergence Survey and surveys of woodland to establish whether there are any additional potential roosting sites.	The Applicant confirmed that bat emergence and re-entry surveys were undertaken between July and September 2023 in the proximity of trees which have been identified as possible roosts sites and as having moderate to high suitability for roosting bats.  In summary, the findings confirm the absence of bat roosts from the Long Strip woodland other than the previously occupied roost. As such, the conclusions of the environmental statement in relation to bats are entirely unchanged other than the clarification that no project specific bat license is required.
Discussion on the loss of Long Strip, focussing on the proposed compensatory woodland	The Applicant noted that a meeting with NELC was held on 16 January 2024 to progress the outline Woodland Compensation Strategy that was submitted with the application. There is a requirement in the draft DCO to create a woodland compensation plan which develops the woodland strategy into a living piece of compensatory habitat.  The Applicant then made reference to a plan that will be submitted at Deadline 1 which shows a new site, at Battery Street, Immingham that is designated under the local plan for biodiversity enhancement. Further, due to the Viking CCS proposals potentially affecting the northern part of the Mamby Road site, the Applicant noted that the focus in the woodland compensation plan will be on the southern element supplementary planting where this possible as well as the new [Battery Street] site shown on the plan. The Applicant confirmed that there are no issues with compulsory acquisition with the new site as NELC is the owner and positive discussions are underway in relation to supporting woodland planting in that location. The Applicant further confirmed that if the approach is agreed with NELC, further consideration will be given to how this can be secured.



Explanation of the qualitative approach that is to be taken to Biodiversity Enhancements.	The Applicant explained that the oLEMP delivers the best habitats the Applicant has been able to incorporate within the terrestrial site areas. Work Nos. 3, 5 and 7 have substantial operational and security constraints, in particular, the size of the operational plant and structures which leaves little spare land for additional planting around the margins. Moreover, the security fencing around the hydrogen production facility prevents putting ecological features on the site boundary. Despite this, the Applicant has considered the layout of the site extensively to identify opportunities to deliver enhancement, and these have been taken forward wherever possible.
Explanation of why further studies and surveys are not proposed to be carried out despite landside elements of the development being decommissioned	The Applicant emphasised that the DCO does not seek a time limited consent for either the NSIP or the associated development. This is not a situation such as some solar farms, for example, where the application is put forward on the basis that this would be a temporary development. As such, the associated development is not put forward on the basis that it will be temporary or that the DCO will limit its life. It is likely that some parts of the associated development would need to be maintained or replaced due to reaching the end of their design life but this does not mean that they are temporary development. The DCO contains powers to maintain and replace provided that such works do not give rise to materially new or different environmental effects so there is a control in terms of not taking the development beyond what has been assessed.
	Addressing the point about surveys, all the suitable habitat for breeding and wintering birds across all terrestrial land areas will essentially be removed in year one of construction. As such, for 25 years those areas will not be particularly suitable for the majority of breeding or wintering birds so there is no reason to believe there is any reason to survey the birds on land as there will be a development in place there. In relation to the marine areas, any maintenance and replacement works on the landside elements would occur over 200m away from the marine elements so there is little opportunity for this to have a impact on the birds that are important in the marine context.
Explanation as to why the Shadow HRA does not address decommissioning.	The Applicant confirmed that there was no intention to cover decommissioning in the HRA as the jetty terminal itself will not be decommissioned and would become a part of the port estate for the long term.



#### 7 APPLICANT'S SUMMARY OF CASE ON ITEM 8: DRAFT DEVELOPMENT CONSENT ORDER

#### 7.1 **Item 8 (Draft Development Consent Order)**

Table 8.1 – Item 8 (Draft Development Consent Order)

Issue Discussed	Summary Of Oral Case
Discussion on the submission requirements for dDCO and EM updates, and justification sought for dDCO provisions especially novel drafting.	The Applicant set out what can reasonably be regarded as "novel" drafting in DCOs made pursuant to the Planning Act 2008, drawing a distinction between (i) wording which falls within the ambit of the Act itself and similar wording in made DCOs but which has by necessity been tailored to match the circumstances of the authorised project in question and (ii) completely unique wording which is innovative in creating new legal structures and approaches which depart wholesale from the ambit of the Act or other relevant Acts and made DCOs. The example was given of the Sizewell C DCO where provisions were added in order to draw within the order all the elements of the Town and Country Planning Act 1990 which give effect to section 106 agreements in order to ensure that they run with the land and can be enforced against successors. These provisions were added in response to an issue that arose during the examination which led to entirely novel legal drafting to allow for a simple agreement to be given the status of a section 106 agreement which had never been done before. It would be inappropriate and disproportionate to require similar levels of justification in both cases. The Applicant does not consider that there is any "novel" drafting in this sense in the dDCO.
Explanation of the discharging process for Requirements and if the drafting in the dDCO "submitted to and approved by" is robust enough; specific focus for the discharge of R14.	The Applicant explained that the procedure for discharging requirements is contained within Schedule 17 of the draft DCO and sets out the process of consent approvals which includes the discharging of requirements. Paragraph 2 sets out how long the authority has to make the decision, as well as the power of the authority, to grant, refuse or grant subject to conditions a consent or agreement. In the absence of determination by the authority, there is a provision that provides for the grant of an application after the lapse of a certain time period. This provision, however, is caveated where an application is accompanied by a report that notes any materially new or different environmental effects in relation to the application matter, in which case, the application will be taken to be refused after the relevant time period. Paragraph 3 provides for the authority making reasonable requests for further information and the timelines for this depending on whether there is a consultee involved. Paragraph 4 deals with appeals.  The Applicant noted that Schedule 17 (procedure regarding certain approvals, etc.) of the draft DCO explains in paragraph 2 where an application is made for any consent, agreement or approval required by any of the provisions of the draft DCO, except where disapplied by Article 63(5) (Procedure regarding certain approvals, etc.), the process set out in that Schedule applies. The process therefore applies to





discharging Requirements under Schedule 2 (Requirements) of the draft DCO. Further, Article 63(1) of the draft DCO necessitates that consent, agreement or approval, including those that are pursuant to a Requirement, must be giving in writing. As such, there is no need to repeat this wording through the DCO as it would be duplication of wording that already applies.

The Applicant further noted the status of the draft DCO as a draft piece of legislation that is subject to the principles of statutory drafting which discourages adding extraneous wording into statutory instruments.

The Applicant explained that Requirement 14 does not have a discharging authority because it is a notification provision and as such does not seek or require an approval. Instead, compliance with the requirement will be notified to the local planning authority. The Applicant explained that Requirement 14 prohibits Work No. 7 from being brought into operational use until the Applicant provides confirmation to NELC that the necessary steps have been taken in respect of the Queens Road residential properties. Those steps being the undertaker:

- Entering and taking possession of the property;
- o Ensuring the residential use of the property has ceased; and
- o Serving notice confirming that both those elements have happened.

In response to whether the planning authority have any enforcement provisions in respect to compliance with this requirement, the Applicant confirmed that a breach of this requirement would be a criminal offence which the authority would be aware of.

# How the activities currently excluded in the definition of commence are controlled, monitored and mitigated

The Applicant explained that the definition of 'commence' in the order only finds its life in relation to three requirements of the draft DCO, which are requirements 6, 7 and 12.

Requirement 6 prevents any works within Work No. 1 from commencing until the CEMP is submitted and approved by the relevant authority. Requirement 7 prevents the same activity prior to submission and approval of the CTMP. Requirement 12 also proposes similar constraints until the submission and approval of a drainage strategy. The effect of defining 'commence' in a way so as to exclude certain works is to take those works alone outside of the prohibition created by these three requirements. The excluded works are those that have been identified as unlikely to give rise to significant environmental effects and as such, do not need to be prevented from occurring before they are made subject to controls within the CEMP, CTMP etc. Moreover, many of the works that are excluded are not subject to



	<del>-</del>
	planning permission or regulation under the planning system. The examples of archaeological works, site clearance works and clearance of vegetation not subject to protection were given.
	The Applicant emphasised the intention is to carve out a very limited part of the works for a limited set of purposes by reference to the three requirements. This matter is more particularly addressed in response to Q1.18.2.5 (Commence).
Design related commitments and how these are secured in the dDCO.	The NSIP is developed to a different stage of design to the associated development as it is more tightly constrained and defined in terms of its parameters. These parameters are secured within both the DCO and deemed marine licence. The vertical parameters of Work No.1, for example, as well as maximum pile numbers and similar detail are secured by way of the CEMP that must be submitted to and approved in accordance with paragraph 8 of the DML (Schedule 3) and Schedule 2 (Requirements) to the DCO. In terms of design principles, there is not much scope for the design of the NSIP to evolve due to the need to minimise the impact on intertidal habitats as well as safety considerations.  In terms of the hydrogen production facility, safe and effective functioning is the paramount consideration, as well as the regulatory considerations relevant to the site. However, there are requirements in the DCO, taking Requirements 4, 8 10 and 16 in Schedule 2 (Requirements)as examples, that allow for the design to be subject to external approval outside of the more functional, safety considerations.
In relation to agenda items (v) and (vi), t	he Applicant agreed to address these in its responses to the ExA's First Written Questions.

In relation to agenda item (vii), the Applicant took a post-hearing action to address this item at Deadline 1 in a separate note.







## **Immingham Green Energy Terminal**

Issue Specific Hearing 2 (ISH2) Landside Issues, including draft Development Consent Order

Wednesday 21 February 2024

Agenda Item 3(i): Construction Effects







Indicative Construction programme and phasing are set out in Table 2-10 of ES Chapter 2 as replicated below:

**Table 2-10: Indicative Construction Phasing Timeline for the Project** 

Phase	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Phase 1											
Phase 2								,			
Phase 3											
Phase 4											
Phase 5								2			
Phase 6											

There would be a phased approach to the construction of the Project:

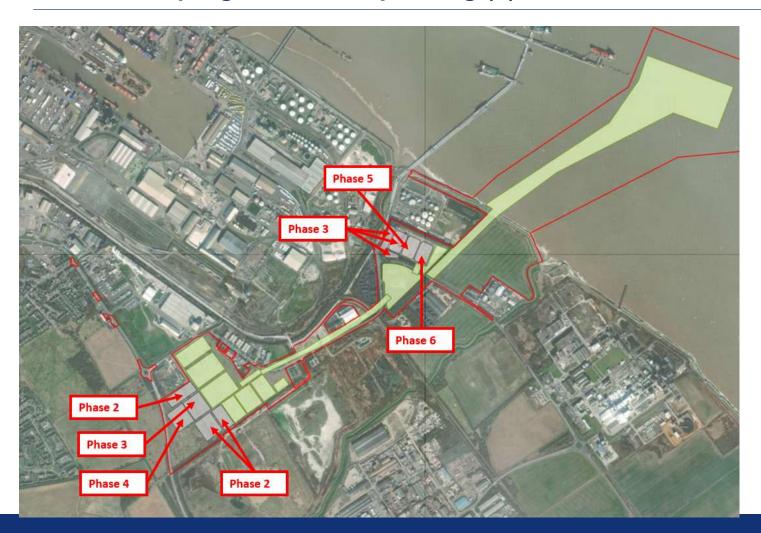
#### Phase 1:

- Construction of the Terminal (NSIP in whole, including jetty, jetty access road etc)
- First phase of the green hydrogen production facility (including works on both the East Site and West Sites)
- Phase 1 is likely to start in early 2025 and last for between two and a half and three years.

## **Construction programme and phasing (2)**







Site Boundary
Phase 1
Phases 2 - 6 (Terrestrial)

## Construction programme and phasing (3)





#### Phase 2 onwards:

- A further five phases of the hydrogen production facility would be constructed incrementally to increase the processing capacity as the market for green hydrogen increases
- For the purposes of this ES, a development scenario has been defined based on a six-phase construction timeline through to full completion of all phases over an indicative eleven-year period.
- Market demand could accelerate the programme for Phases 2-6, Phase 1 would represent the peak of construction for relevant impacts such as material movements, HGV numbers, irrespective of the subsequent programme for Phases 2 onwards.
- EIA uses worst case for any topic, e.g. for noise e.g. construction and operation of Phases, 2, 3, 4 typically dominate impacts at receptors to the west
- The start of construction of Phase 2 would depend on a number of factors including market demands for hydrogen at that point in time, whilst the timing of subsequent phases would be subject to the same tests

Table 2-10: Indicative Construction Phasing Timeline for the Project

Phase	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Phase 1											
Phase 2											
Phase 3											
Phase 4											
Phase 5											
Phase 6											

### **Operational Phase**





#### **NSIP:**

Jetty expected to be fully operational in Y3

#### **Hydrogen Production Facility (Phase 1):**

- Expected to start operation in Y3
- Comprising above ground piping (work No 1, 2 and 4), Ammonia storage tanks and associated process and utility units (Work No 3), Underground pipeline corridor (Work No 6), Two Hydrogen Production Units, One Hydrogen liquefier, hydrogen storage and tanker loading, utilities, buildings, roads and site security (Work No 7)

#### **Hydrogen Production Facility (Fully built – all 6 phases)**

- Expected to be in 'full operation' at the end of Y11 or sooner
- Comprising up to 6 Hydrogen Production Units, up to 4 Hydrogen liquefiers
- Fully built operation, depends on market conditions, may accelerate

## **Decommissioning Phase**





**NSIP:** The main elements of the Terminal would not be decommissioned.

- The jetty, jetty head, loading platforms, access ramps and the jetty access road would, once constructed, become part of the fabric of the Port estate and would...
- ...continue to be maintained so that they could be used for port-related activities to meet a long-term need.

The Hydrogen Production Facility would have a design life of up to approximately 25 years...

- although the **operational life** is likely to be longer, depending on its integrity and market conditions at that time.
- It is likely that the operational life of the facility would be extended through replacement of plant and refurbishment.
- When appropriate, this infrastructure would be decommissioned.
- It is anticipated that plant and equipment on the jetty topside associated with hydrogen production would be decommissioned in parallel with the decommissioning of the related landside elements.

#### Alan Lewis - Speaker's notes related to Construction, Operation and Decommissioning

#### **Construction Phase Slide 1**

- Indicative Construction programme and phasing are set out in Table 2-10 of ES Chapter 2 [APP-044] as replicated on the slide.
- As we outline in the ES, Phase 1 would consist of:
  - Construction of the entire Jetty, access ramp and dredging of the berth pocket (all of Work No. 1..and so all of the NSIP)
  - the jetty access road (Work No. 2)
  - First phase of the green hydrogen production facility (including works on both the East Site and West Sites), comprising:
    - Ammonia storage tanks and associated process and utility units (Work No 3)
    - Underground pipeline corridor and culvert (Works No 4 and 6)
    - Two Hydrogen Production Units, One Hydrogen liquefier, hydrogen storage and tanker loading, utilities, buildings, roads and site security (Work No 7)
    - The use of the two Temporary Construction Areas (Work Nos 8 and 9)
  - Phase 1 is likely to start in 2025, subject to the DCO being made and discharging requirements..
  - ..and last for between two and a half and three years.

#### **Construction Phase Slide 2**

- Illustrates the extent of Phase 1 in green..
- .....but Phase 1 is even more extensive than this as it includes use of the Laporte Road, TCA - Works No 9, not shaded here and the Queens Road TCA, Works No 8
- Important to note that it is this phase which dominates much of the consideration of construction impacts, including all of the marine impacts and many of the terrestrial impacts related to material use, transport etc
- Phases 2-6 are also shown, these are the later stages of the build out of the hydrogen production facility.

#### **Construction Phase Slide 3**

#### Phase 2 onwards:

- A further five phases of the hydrogen production facility would be constructed incrementally to increase the processing capacity as the market for green hydrogen increases, taking up to 11 years
- Market demand could accelerate the programme for Phases 2-6, Phase 1
  would represent the peak of construction for relevant impacts such as
  material movements, HGV numbers, irrespective of the subsequent
  programme for Phases 2 onwards.
- ..There may be some overlap between phases to account for market development (and whether demand is greater for liquid hydrogen for HGVs or industrial hydrogen at that time), for example as shown for phases 4 and
- EIA uses worst case for any topic, e.g. for noise e.g. construction and operation of Phases, 2, 3, 4 typically dominate impacts at receptors to the west
- The start of construction of Phase 2 would depend on a number of factors including market demands for hydrogen at that point in time, whilst the timing of subsequent phases would be subject to the same tests.

#### **Operational Phase**

**NSIP:** The jetty is expected to be **fully operational in Y3** 

#### **Hydrogen Production Facility (Phase 1):**

- Expected to start operation in Y3
- ...Comprising above ground piping (work No 1, 2 and 4), Ammonia storage tanks and associated process and utility units (Work No 3), Underground pipeline corridor (Work No 6), Two Hydrogen Production Units, One Hydrogen liquefier, hydrogen storage and tanker loading, utilities, buildings, roads and site security (Work No 7)

#### **Hydrogen Production Facility (Fully built – all 6 phases)**

- Expected to be in 'full operation' at the end of Y11 or sooner.
- Comprising a total of 6 Hydrogen Production Units, 4 Hydrogen liquefiers
- Fully built operation, depends on market conditions, may accelerate.

#### **Decommissioning**

- The ES states at para 2.7.1-2.7.2:
  - 'The main elements of the Terminal would not be decommissioned.
    - The jetty, jetty head, loading platforms, access ramps and the jetty access road would, once constructed, become part of the fabric of the Port estate and would..
    - o in simple terms, continue to be maintained so that they could be used for port-related activities to meet a long-term need.
  - The hydrogen production facility would have a design life of up to approximately 25 years,...
    - although the operational life is likely to be longer, depending on its integrity and market conditions at that time.
    - ..it is likely that the operational life of the facility would be extended through replacement of plant and refurbishment..
    - ... When appropriate, this infrastructure would be decommissioned.
    - It is anticipated that plant and equipment on the jetty topside associated with hydrogen production would be decommissioned in parallel with the decommissioning of the related landside elements.'