Immingham Green Energy Terminal

Deadline 1 Submissions

Associated Petroleum Terminals (Immingham) Limited and Humber Oil Terminals Trustee Limited

"The IOT Operators"

Planning Inspectorate Ref: TR030008

13 March 2024



WORK\51703815



TABLE OF CONTENTS

WRITTEN REPRESENTATIONS2		
1	INTRODUCTION2	
2	NEED FOR THE IGET AND IOT	
3	PRIMARY CONCERNS WITH THE PROPOSED DEVELOPMENT9	
4	MARINE ENVIRONMENT ASSESSMENTS12	
5	TRAFFIC ASSESSMENTS12	
6	STATEMENT OF COMMON GROUND13	
7	SUMMARY OF CONCERNS13	
RESPC	ONSE TO WRITTEN QUESTIONS14	
8	WRITTEN QUESTIONS 1	
9	DEPARTURE PROCESSES14	
10	MITIGATION MEASURES15	
11	SAFETY STUDIES AND COMAH REGULATIONS15	
SUMMARY OF ORAL SUBMISSIONS17		
12	ISSUE SPECIFIC HEARING 2	
13	ISSUE SPECIFIC HEARING 3	
APPENDIX 1 –TECHNICAL NOTE ON LAND BASED TRANSPORT IMPACTS		



DEADLINE 1 SUBMISSIONS

This submission forms the Written Representation of the IOT Operators and includes responses to the Examining Authority's first set of Written Questions and the IOT Operators' summary of oral submissions at Issue Specific Hearings 1, 2 and 3.

The Written Representation exceeds 1,500 words, with a summary included at part 7 below.

WRITTEN REPRESENTATIONS

1 INTRODUCTION

- 1.1 This Written Representation is submitted on behalf of Associated Petroleum Terminals (Immingham) Limited ("APT") and Humber Oil Terminals Trustee Limited ("HOTT") in relation to Associated British Ports' ("Applicant") application for a development consent order ("DCO") to construct a new multi-user liquid bulk green energy terminal comprising a single berth, including the construction and operation of a hydrogen production facility on the eastern side of the Port of Immingham, North East Lincolnshire, DN40 2LZ. If constructed, the development will be known as the Immingham Green Energy Terminal Development ("IGET Development"). The first customer of the IGET Development will be Air Products BR Ltd who will construct and operate a green hydrogen production facility on land which forms part of the IGET Development.
- 1.2 HOTT is the licensee (from the Applicant) of the Immingham Oil Terminal Jetty ("IOT") and lessee (from the Applicant) of the associated oil terminal and tank farm ("Oil Depot"). APT operates IOT and the Oil Depot on behalf of HOTT (HOTT and APT are referred to together in this response as "the IOT Operators").
- 1.3 The IOT Operators are joint venture companies owned equally by Phillips 66 Limited ("Phillips 66") and Prax Lindsey Oil Refinery Limited ("Prax"). Phillips 66 is the owner of the Humber Refinery and Prax is the owner of the Lindsey Oil Refinery (together referred to as "the Refineries"). The principal activity of the IOT Operators is the operation of marine terminals on behalf of Phillips 66 and Prax. They are also responsible for the operation of much of the pipeline system between the IOT and the Refineries.
- 1.4 The activity of the IOT Operators is almost entirely in response to the requirements of Phillips 66 and Prax for marine movements of feedstock and products to and from the Refineries. The principal aim of the IOT Operators is to maximise the efficiency with which



its facilities (including the IOT) are used whilst having proper regard for safety and the environment.

- 1.5 The IOT Operators previously submitted a Relevant Representation on 1 December 2023 [RR-014] in relation to the IGET Development. The Relevant Representation contains further background information on the IOT Operators and the importance of the IOT as well as providing an overview of the IOT Operators' concerns on the IGET Development.
- 1.6 This Written Representation will provide further detail on the IOT Operators' concerns, emphasise the importance of the IOT and the Refineries, and should be read alongside the IOT Operators' Relevant Representation.

2 NEED FOR THE IGET AND IOT

- 2.1 The Planning Statement **[APP-226]** and Chapter 3 of the Applicant's Environmental Statement ("**ES**") on Need and Alternatives **[APP-045]** submitted with the DCO application sets out that there is an imperative need for the IGET Development to provide additional port capacity within the Humber Estuary in order to provide port infrastructure for the import and export of liquid bulk energy products in the Humber to support the transition to net zero and the decarbonisation of the Humber industrial cluster and other locations.
- 2.2 The Applicant also states that the National Policy Statement for Ports ("**NPSfP**") sets out the need for the IGET Development which is key to the consideration of the DCO application for the IGET Development. The Applicant summarises that the NPSfP recognises that as well as catering for overall demand, the total need for port infrastructure also depends on the need to retain the flexibility that ensures that port capacity is located where it is required, and on the need to ensure effective competition and resilience in port operations.
- 2.3 The IOT Operators do not seek to directly challenge the need case presented by the Applicant in the Planning Statement and Chapter 3 of the ES. However, the need for the IGET should be considered in light of the significant need for the IOT and the Refineries which rely on the IOT. The need for the IOT and the Refineries is of undoubted national significance and risks to its operations should weigh heavily in consideration of the proposals.



Legislative Context

- 2.4 The recently enacted Energy Act 2023 ("**Energy Act**") includes at Section 267 of Part 12 (Core Fuel Sector Resilience) that the functions of the Secretary of State granted under that Part must be exercised with a view to (a) ensuring that economic activity in the United Kingdom is not adversely affected by disruptions to core fuel sector activities, and (b) reducing the risk of emergencies affecting fuel supply.
- 2.5 Under Section 268 of the Energy Act, the IOT Operators are core fuel participants carrying on core fuel sector activities and the provisions in Part 12 to maintain and improve core fuel sector resilience refer to the capability of core fuel sector participants to:¹
 - (a) Manage the risk of,
 - (b) Reduce the potential adverse impact of, and
 - (c) Facilitate recovery from,

disruptions to core fuel sector activities.

2.6 This is a clear manifestation of the increasing government focus on securing, promoting and minimising any risks to the country's fuel supply.

Policy context

- 2.7 There is clear policy support in favour of the IOT and the Refineries as contained in the NPSfP and Overarching National Policy Statement for Energy EN-1 ("**NPS EN-1**").
- 2.8 Paragraph 3.1.5 of the NPSfP states:

"Ports have a vital role in the import and export of energy supplies, including oil, liquefied natural gas and biomass, in the construction and servicing of offshore energy installations and in supporting terminals for oil and gas pipelines. Port handling needs for energy can be expected to change as the mix of our energy supplies changes and particularly as renewables play an increasingly important part as an energy source. Ensuring security of energy supplies through our ports will be an important consideration, and ports will need to be responsive both to changes in different types of energy supplies needed (and to the need for facilities to support the development and maintenance of offshore renewable

¹ Energy Act 2023, at s268(5).



sites) and to possible changes in the geographical pattern of demand for fuel, including with the development of power stations fuelled by biomass within port perimeters."

- 2.9 The NPSfP is clear that there is a critical need for ports which import and export energy supplies such as oil and that ensuring security of energy supplies through ports will be an important consideration.
- 2.10 There is also clear policy support for oil terminals and refineries which is emphasised in paragraph 3.9.3 of the extant NPS EN-1 which states:

"The UK needs to ensure it has safe and secure supplies of the oil products it requires. Sufficient fuel and infrastructure capacity are necessary to avoid socially unacceptable levels of interruption to physical supply and excessive costs to the economy from unexpectedly high or volatile prices. These requirements can be met by sufficient, diverse and reliable supplies of fuel, with adequate capacity to import, produce, store and distribute these supplies to customers. This in turn highlights the need for reliable infrastructure including refineries, pipelines and import terminals and the need for flexibility in the supply chain to accommodate the inevitable risk of physical outages."

2.11 Furthermore, notwithstanding the UK's net zero ambitions, there remains an important role for oil in the future which is confirmed in the draft NPS EN-1 published in March 2023. This is set out in paragraph 2.3.11:

"The UK's oil and gas sector recognises the demand for oil and gas will be much reduced in the future, but also recognises the key role that it can play in helping the UK meet its net zero commitment. Clear action will need to be taken to build on the proven capabilities within the sector to lead in new and emerging energy technologies."

2.12 The importance of oil in the future is also set out in the UK Government's recent Energy Security Plan² released in March 2023 ("Powering Up Britain") which states at pp. 3-4:

"Demand for oil, gas, and other fossil fuels will decline but they retain a crucial role. They are critical transition fuels, key to ensuring secure energy supplies and will form an important part of our future economy. We must take the necessary steps to ensure we can rely on the supply of gas and oil, whether from domestic production or from importing these fuels."

² Department for Energy Security & Net Zero (March 2023) *Powering Up Britain: Energy Security Plan.* ISBN 978-1-5286-4018-3 Available at: https://assets.publishing.service.gov.uk/media/642708eafbe620000f17daa2/powering-upbritain-energy-security-plan.pdf.



- 2.13 In addition, the importance of the Humber Refinery and the Lindsey Oil Refinery to the region and the wider country's economy is expressly acknowledged in a wide range of economic and development plan policy documents.
- 2.14 This includes Greater Lincolnshire LEP Strategic Economic Plan: 2014-2030 which confirms that "The Humber petrochemicals/ chemicals sector is of European scale and the second largest in the UK, supported by the Humber ports. Two oil refineries, Phillips66 and Total Lindsey, provide 27% of the UK's refinery capacity and are located on the South Humber Bank".
- 2.15 Furthermore, paragraph 9.39 of the *North Lincolnshire Core Strategy* also emphasises the importance of the refineries:

"The South Humber Bank employment area is currently occupied by a range of estuaryrelated industrial operators such as large oil, gas and electricity companies, riverside terminal facilities and associated activities including storage, processing and distribution. The area is also fast becoming an energy capital. The site is already home to a number of chemical companies, which provide 27 percent of the UK's oil refinery capacity."

- 2.16 The North East Lincolnshire Council Local Plan 2013 to 2032 also expressly mentions the importance of the refineries to the UK's refining capacity at paragraph 6.9.
- 2.17 There is therefore clear legislation and national policy guidance which emphasises the current and future importance of oil as part of the UK's energy mix and maintaining and improving its security. The need for the IGET Development should be considered in the context of potential impacts on the UK's energy security.

Importance of the IOT

- 2.18 The IOT was opened in 1969 and was built to serve the oil refineries that had been built north west of the Immingham Dock site: the Continental Oil Refinery (now the Humber Refinery) and the Lindsey Oil Refinery. The IOT continues to be a critical aspect of the operation of these oil refineries.
- 2.19 The IOT and the Refineries are deemed to be Critical National Infrastructure by the National Protective Security Authority. They are of national significance in terms of energy security given the importance of the facilities for the UK's oil supplies and to the UK's economy. The IOT and the Refineries are also facilities used for the purpose of core fuel



sector activities making Philips 66, Prax and the IOT Operators Part 12 Facility Owners and core fuel sector participants under the Energy Act.

- 2.20 The IOT consists of product storage tanks, associated pumps, pipe work and equipment for product transfers between ship and shore and vice versa, operational control facilities, management, maintenance and support facilities, together with a jetty approximately 1,000 metres long with seven berths for ships to dock. These consist of three main berths, two coaster berths and two barge berths.
- 2.21 The IOT imports and exports products with approximately 45% of the UK's marine oil exported via the IOT. The IOT is of critical importance for 'just in time' supply to Scotland and the regions which means that disruptions, for example if the Finger Pier were damaged for any period of time, will impact the supply of oil products. In order to maintain supply, product will have to be sourced elsewhere leading to higher supply costs (product and freight) and increased likelihood of stockouts (particularly in the Scottish Isles).
- 2.22 The IOT is essential to the operations of the Refineries as all crude oil for the Lindsey Oil Refinery and some crude oil for the Humber Refinery arrives by tanker at the IOT before being transferred to the refineries by pipeline.
- 2.23 Together, the Refineries make up approximately 27% of the UK's refining capacity. The IOT is essential to the export capabilities of the Refineries, with approximately 40% of the Humber Refinery's production and 33% of the Lindsey Oil Refinery's production being exported. Products from the Refineries are pumped via pipeline to the IOT tankage to be exported via tanker.
- 2.24 Vessel movements to and from the IOT are therefore critical to the operation of the Refineries and any prejudice to the operations at the IOT would result in prejudice to their continuing operations.

Importance of the Refineries

- 2.25 Both the Humber Refinery and the Lindsey Oil Refinery are individually nationally significant pieces of infrastructure and crucial to the region and the country's economy.
- 2.26 The Humber Refinery provides approximately 15% of UK road fuel demand and is the UK's only producer of Sustainable Aviation Fuel ("**SAF**") at scale, providing British Airways



with SAF on a multi-year contract. The Humber Refinery is also a key business within the Yorkshire and the Humber region, providing significant economic opportunity and spending millions of pounds annually with over 1,000 businesses across the region.

- 2.27 The refinery also produces specialty graphite coke, a precursor material to synthetic graphite which is used to produce lithium-ion batteries crucial for the electric vehicles global supply chain, as well as high grade petroleum coke used to recycle steel and for components in lithium-ion batteries used for smart phones, tablets and electric vehicles.
- 2.28 The Humber Refinery is one of the most complex refineries in Europe with an expansive range of upgrading units that allow the refinery to manufacture a range of products, including materials not manufactured elsewhere in the UK or Europe.
- 2.29 The Lindsey Oil Refinery supplies the UK market with fuels, with the greater part of that output being petrol and diesel for road vehicles and also including specialty products such as fuel oil, bitumen, kerosene and the supply of aviation fuel to Heathrow airport. The refinery incorporates some of the most advanced refining and conversion processes in Europe with the capacity to process up to 113,000 barrels of oil a day.
- 2.30 The Prax Lindsey Oil Refinery is also reducing the carbon intensity of its fuels through a regional Carbon Capture and Storage project, investments in energy efficiency and increasing use of low-carbon, sustainable biofuels, blended in its main grades of gasoline, jet and diesel fuels, alongside bespoke low-carbon fuels.
- 2.31 The Refineries are crucial to the UK's economy given that numerous industries are reliant on the supply of oil and on security of energy supply (as well as the other products supplied by the Refineries). The IOT Operators were recently required to complete the Criticalities Cros-Sector Impacts questionnaire for Critical National infrastructure as part of the DESNZ energy security drive. There is also the recent announcement regarding the closure of Grangemouth Refinery in early 2025, Scotland's only remaining oil refinery, which puts even greater weight on the importance of protecting the facilities here and securing supply of oil to the Refineries.
- 2.32 Phillips 66 is pursuing projects, technologies and collaborations that support decarbonisation and the U.K. Government's 2050 net-zero ambitions through its Ten Point



Plan for a Green Industrial Revolution. This includes acquiring feedstocks and upgrading waste to lower-carbon fuels and products at the Humber Refinery.

- 2.33 Nearly 800 jobs were directly employed by Phillips 66 in 2022 at the Humber Refinery and an additional 160 jobs in the company's London head office. The Lindsey Oil Refinery employs approximately 400 staff and another 400 contractors.
- 2.34 Any prejudice to the continuing operation of the Humber Refinery or the Lindsey Oil Refinery would be contrary to the public interest in terms of the impacts on the local and national economy and on the UK's energy security. The essential need for the IOT and refineries means that the need for the IGET Development, and any risks it creates for the safe and efficient operation of the IOT and Refineries, should be considered in this context.

3 PRIMARY CONCERNS WITH THE PROPOSED DEVELOPMENT

- 3.1 Chapter 22 of the Applicant's Environmental Statement **[APP-064]** presents the findings of an assessment to determine the likely significant adverse effects of the proposed IGET Development on human health, welfare and/or the environment as a result of a major accident and/or disaster.
- 3.2 The IGET Development is immediately adjacent to the IOT. The IOT Operators have concerns about the IGET Development from a safety perspective as outlined in their Relevant Representation [**RR-014**].
- 3.3 This includes the consideration that the IOT is designated as an upper tier COMAH site which is a fully and constantly manned, operating 24 hours per day throughout the year, and is therefore subject to strict requirements regarding any events that cause or are likely to cause serious injury, loss of life, damage to property at an APT controlled site or serious disruption outside these areas. Evacuation of the IOT, and its impact on fuel supply from the IOT, must be considered along with any domino effects which may arise from the introduction of new dangerous substances on the adjoining IGET site.
- 3.4 The IOT Operators are engaging constructively with the Applicant but remain concerned about site safety issues relating to the construction, operation and decommissioning phases of the IGET Development, including the risk of major fire, explosion or release of toxic gas. This could occur as a result of the following:



- (a) Hydrogen leakage from the pipelines that cross the East Site;
- (b) Ammonia leakage from the pipelines that cross the East Site;
- (c) Ammonia leakage from the refrigerated ammonia storage tank on the East Site;
- (d) Hydrogen and/or ammonia leakage from the hydrogen production units on the East Site; or
- (e) Hydrogen leakage from the hydrogen liquefiers on the East Site.
- 3.5 The IOT Operators are concerned that ammonia and, to a greater extent, hydrogen, are both flammable substances and a leakage may cause a major fire or an explosion, which may affect the IOT site. In addition, the release of ammonia gas may result in a toxic gas release impacting on the workers on the IOT site. These events have the potential to cause significant injuries and loss of life for those working at the IOT as well as causing major disruption to the activities of the IOT Operators.

Required Mitigation Measures

- 3.6 The IOT Operators' position is that the potential impacts of the IGET Development on their existing assets and activities gives rise to a need for additional mitigation measures to be secured as part of the proposals. The measures which the IOT Operators have identified to date, and which continue to be considered necessary, are:
 - (a) Replacement accommodations; blast and toxic proof buildings will need to be provided to replace any existing occupied landside building which is significantly affected by explosion or toxic gas risks, such as the APT office building and engineering block on the APT facilities. Improvements to the Jetty Office Block may also be necessary to protect against toxic gas and/or blast risks pending an expert assessment. The need for such buildings is created directly by the risks created by the IGET proposals and is reinforced by the standard to which the Applicant is proposing to deliver its own control room on the West Site which is (according to the high-level detail) further from the primary source of any toxic emissions and certain blast risks than the existing office and engineering block on the APT facilities.
 - (b) **Primary escape route**; A clear escape route needs to be identified and provided from the existing APT facility (to the South East corner).

10



- (c) **Secondary escape route**; an additional secondary escape route to the North West is also considered necessary in the event that emissions lead to the primary escape route being inoperable.
- (d) Refuges for fugitive emissions on IOT jetty; Table 22-5 of Chapter 22 of the ES [APP-064] indicates that safe havens will be located on Site and on or at the foot of the IGET jetty to allow operators to shelter in the event of an ammonia release. It is the IOT Operators' position that equivalent safe havens should be provided and existing havens improved on the IOT berths and jetty as well, for the protection of personnel in that location from the risks posed by the IGET proposals. Details, locations and capacity for these havens must be sufficient for the maximum number of personnel potentially affected and at a minimum would need to protect against toxic gas with potential blast-proofing required on IOT Berth 3.
- (e) Alarms; installation of fire and toxic gas detection, with an appropriate alarms system, is required on the IOT jetty and terminal site. Details, sensor locations and integration with existing systems on the IOT jetty and terminal will need to be determined by modelling, along with repeater alarms from the proposed site.
- 3.7 It is noted that the Applicant indicates in its ES Chapter 22 **[APP-064]** in various locations that mitigation measures of this type would be required to be delivered under the COMAH Regulations. However, there is no clear explanation of the process which would be followed by the competent authority, nor is there an explanation that the COMAH process works as a notification process, rather than a land use consent. It is the IOT Operators' position that mechanisms to secure these mitigation measures must be imposed on any DCO if it is to be acceptable at this land use consenting stage.
- 3.8 The Applicant's assessment of safety concerns in the ES also refers to certain safety studies which needed to be concluded, and which may recommend additional mitigation measures which do not currently form part of the Applicant's DCO application. The IOT Operators have been provided with the summary presentations and preliminary results of some of these studies but the final reports are still awaited and the IOT Operators have engaged advice of Process Safety experts to review these reports.



Ongoing Engagement with Applicant

- 3.9 The IOT Operators are engaged in ongoing and positive discussions with the Applicant and Air Products. The Applicant and Air Products have accepted that these mitigation measures are necessary and appropriate.
- 3.10 In light of that positive position being reached between the parties, the IOT Operators are not proposing to provide further detailed submissions at this stage. They are instead continuing to engage actively with the Applicant and Air Products to agree the mechanism by which those mitigation measures will be secured.
- 3.11 To the extent that it is not possible to secure those measures, the IOT Operators reserve the right to make further representations as part of the examination process, including the submission of such further evidence as may be required to substantiate its case.

4 MARINE ENVIRONMENT ASSESSMENTS

- 4.1 The IOT Operators have engaged a marine consultant to consider the likely construction and operational concerns associated with the IGET. The Applicant and Air Products are aware that further consideration is being given to any mitigation or management measures which may be required to ensure the safe construction and operation of the IGET in close proximity to the IOT. It had not been possible to obtain that input from a marine consultant at an earlier date due to resource constraints imposed on the IOT Operators by two consecutive Development Consent Orders being promoted by the Applicant; the present application and prior to that the application for the Immingham Eastern Ro-Ro Terminal.
- 4.2 The IOT Operators will aim to raise any concerns emerging out of this ongoing review work with the Applicant, Air Products, and the Examining Authority, at the earliest opportunity. Once identified, it would hope to reach an agreed position on these matters with the Applicant and Air Products.

5 TRAFFIC ASSESSMENTS

5.1 The IOT Operators have commissioned an expert transport consultant to consider the impacts of the development on its operations. A copy of that report is appended to these submissions as **Appendix 1**, and has previously been shared with the Applicant and Air



Products. The IOT Operators are awaiting a response to that report to assess how the concerns or queries raised in that report are being addressed as part of the Application.

6 STATEMENT OF COMMON GROUND

6.1 A draft Statement of Common Ground was received from the Applicant on 8 March 2024. However, it has not been possible to return comments on that draft at the date of this submission. The IOT Operators intend to return comments as soon as possible and will inform the Examining Authority at the earliest opportunity.

7 SUMMARY OF CONCERNS

- 7.1 This Written Representation sets out the IOT Operators' primary concerns regarding to the IGET Development. For the reasons set out above, the IOT Operators consider it essential that satisfactory risk control measures are secured to ensure that operation of the IOT and Refineries, both deemed to be Critical National Infrastructure by the National Protective Security Authority, are not adversely impacted by the IGET Development.
- 7.2 The Applicant and Air Products have accepted that the mitigation measures outlined in part 3 of this Written Representation above are necessary and appropriate. The IOT Operators continue to engage with the Applicant and Air Products to ensure those measures are secured.
- 7.3 The IOT Operators await the outcome of marine assessment work for the reasons explained in part 4 above, and will seek to raise any specific concerns which arise with the Applicant, Air Products, and the Examining Authority at the earliest opportunity.
- 7.4 Part 5 of these representations refers to an expert transport consultant's report which outlines a series of concerns or queries as to who the two development would interact from an onshore transport perspective.



RESPONSE TO WRITTEN QUESTIONS

8 WRITTEN QUESTIONS 1

- 8.1 The IOT Operators have been asked to respond to several questions in the Examining Authorities' first set of written questions ("**WQ1**") [**PD-008**]:
 - (a) **Q1.11.2.5** regarding departure processes;
 - (b) **Q1.11.2.8** regarding mitigation measures; and
 - (c) **Q1.12.3.3** regarding the Completion of Safety Studies and Compliance with the COMAH Regulations.

9 DEPARTURE PROCESSES

- 9.1 The Examining Authority has asked the IOT Operators to explain what the process would be with regards to preventing concurrent departures from the IOT and IGET (Q1.11.2.5).
- 9.2 This process would be managed by Vessel Traffic Services Humber although both the IOT and the proposed IGET will need to order pilots and tugs for any vessels berthing and departing.
- 9.3 The specific order time to sail a vessel would initially be communicated by the respective terminal to the ship's agents who then liaise with the Tugs & Port Authority to ensure that there are assets available to complete the movement order before formally placing the order.
- 9.4 Similar to the larger vessels at the IOT, the IGET tankers (classed as Very Large Gas Carriers) will be Passage Plan Vessels for the purposes of the *Humber Passage Plan*³ and would therefore be required to adhere to a strict tidal window for arriving and departing from the terminal.
- 9.5 The exact size of the CO2 tankers is currently unknown. However, it is expected that these vessels would be considerably smaller and therefore would not be classified as Passage Plan Vessels. This understanding to yet to be confirmed at the time of writing.

³ Associated British Ports, 'Humber Passage Plan' (Humber.com, 2021).



9.6 Should there be a clash between two or more tankers departing from and/or arriving at the IOT and the IGET at the same time, the order in which tanker movements occur (either IOT or IGET) would depend on the tidal conditions (including the flow of the ebb and flood tides), as well as the size and draught of the vessel. This is in line with how simultaneous movements on the IOT berths are currently managed.

10 MITIGATION MEASURES

- 10.1 The Examining Authority has asked the IOT Operators to explain how and if the mitigation measures identified by the Applicant, including an extension to the 5-knot speed limit and an 150m exclusion zone for ships passing the proposed development, would impact upon the IOT's existing operations and ship movements (Q1.11.2.8).
- 10.2 These mitigation measures are already present at the IOT under *Notice to Mariners* No. S.H.34/2011(⁴) and the *Humber Navigation Byelaws* (1990)⁵ at Byelaw 14(3). This prohibits approaching nearer than 150 metres from the face of the berths, imposes a maximum speed of 5 knots for vessels when approaching and passing any jetty when any vessel is mooring, moored or unmooring at a jetty, and requires vessels to have regard to the prevailing tidal and meteorological conditions. This is in place to prevent interaction of other vessels which is compounded by speed, placing extra forces on the moorings of vessels moored alongside the IOT.
- 10.3 Increasing the region of this exclusion area would have no effect on operations at the IOT as the vessels arriving or departing from the IOT are already operating at low manoeuvring speeds during this phase of their passage.

11 SAFETY STUDIES AND COMAH REGULATIONS

11.1 The Examining Authority has asked the IOT Operators whether, following submission of the necessary safety studies as required under the duties for upper-tier COMAH operators and satisfactory assessment by the competent authority (HSE and the EA), the IOT Operators would be content with the Applicant's overall proposal (Q1.12.3.3).

⁴ Associated British Ports, '*Notice to Mariners No. S.H. 34: Passing Immingham Jetties*' (Humber.com, 16 August 2011).

⁵ Associated British Ports, '*The Humber Navigation Byelaws 1990*' (ABPorts.co.uk, Reprinted August 2022).



- 11.2 The Applicant's assessment of safety concerns in the Environment Statement refers to certain safety studies which needed to be concluded, and which may recommend additional mitigation measures which do not currently form part of the Applicant's DCO application.
- 11.3 The final results of all of these studies have not yet been made available and the IOT Operators have already identified specific concerns with the development as proposed which have not yet been adequately addressed by the Applicant. The Applicant and Air Products have acknowledged that those mitigation measures are necessary and appropriate. Any additional mitigation measures recommended in the safety studies will also need to be considered by the IOT Operators.



SUMMARY OF ORAL SUBMISSIONS

12 ISSUE SPECIFIC HEARING 2

- 12.1 During the second issue-specific hearing, the Examining Authority raised questions for businesses in the vicinity affected by the proposed development. The IOT Operators acknowledged that operations managed by the IOT Operators are affected and there are concerns regarding these areas. It was acknowledged that the Applicant and Air Products are actively and positively engaging with the IOT Operators to address these concerns.
- 12.2 In response to questions from the Examining Authority about whether IOT Operators are also classified as a top tier Control of Major Accident Hazards (COMAH) facility, the IOT Operators affirmed this to be accurate.
- 12.3 Further questions from the Examining Authority queried if concerns related to potential domino effects. The IOT Operators explained that their primary concerns related to the direct impacts on the IOT from emissions of the proposed development, as well as domino effects, which are also taken into consideration.

13 ISSUE SPECIFIC HEARING 3

- 13.1 During issue specific hearing 3, the IOT Operators outlined their general stance regarding marine matters. The IOT Operators have no commercial interest in the outcome of the development proposals, but their assets and operations are situated immediately adjacent to the proposed development (less than 150 metres away, or less than a ship's length), obviously making them an affected neighbour and user of the port. Ongoing dialogue with the Applicant and Air Products was acknowledged in relation to these matters.
- 13.2 The IOT Operators then noted that expert assistance in assessing marine elements was being arranged, particularly regarding concerns that might arise from the defined "future capacity" of 280, although at this point it remains uncertain whether these concerns will necessitate any particular resolution. If there are such continued concerns, it is expected that these will be addressed in the ongoing communications with the Applicant and Air Products and the IOT Operators expressed their intention to keep the Examining Authority informed of any significant developments.
- 13.3 The IOT Operators then agreed to provide an overview of movements to and from the IOT as requested by the Examining Authority. Regarding the Navigational Risk Assessment,



the IOT Operators are engaging expert advice and indicated ongoing consideration on this matter, ensuring that any issues that emerge will be raised promptly.



Appendix 1 – Technical Note on Land Based Transport Impacts

Technical Note 1

Title	Immingham Oil Terminal: Review of Potential Land Based Transport Impacts of the Proposed Immingham Green Energy Terminal				
Prepared by	Peter Mansell	Checked by	PJM	Reviewed by	PJM
Date	6 th March 2024			Version	1.0

1. Introduction

- 1.1. Key Transport Consultants Limited (KTC) is retained by Associated Petroleum Terminals (Immingham) Limited (APT) to provide land-based transport planning advice regarding the potential impacts of a development proposal by Associated British Ports (ABP). The proposal is to construct and operate a green energy terminal at Immingham Eastern Dock in North East Lincolnshire (I-GET). In addition the development includes the construction and operation of a green hydrogen production facility. APT operates the Immingham Oil Terminal Jetty and associated oil terminal and tank farm (Immingham Oil Terminal (IOT)) on behalf of Humber Oil Terminals Trustee Limited (HOTT). IOT is located adjacent to the proposed I-GET development.
- 1.2. The nearby Humber Refinery (Phillips 66 Limited) and Lindsey Oil Refinery (Prax Lindsey Oil Refinery Limited) receive petroleum products from APT by pipeline and, between them, provide approximately 27% of the UK's refining capacity. Apart from the many local jobs and economic benefits provided by APT and the refineries, they are also vitally important to the UK infrastructure and economy.
- 1.3. APT has strict targets to reach its infrastructure in the case of an emergency, as set out in its COMAH safety case. APT is therefore concerned that the construction traffic generated by the I-GET project, including any cumulative impacts with the Immingham Eastern Roll-on Roll-off Terminal (IERRT), could lead to traffic delays and impact on emergency response times.
- 1.4. KTC visited APT to see the Immingham Oil Terminal Jetty from the East Dock side and also to observe traffic movements on the local highway network, including at the Dock East Gate during the afternoon of 28th March 2022 and the morning of 29th March 2022.
- 1.5. KTC has reviewed the following documents from the Planning Inspectorate project website:
 - 4.2_Works_Plans.pdf;
 - 4.3_Illustrative_Layouts.pdf;
 - 4.6_Street_Works_Accesses_Plan.pdf;
 - 4.7_Stopping_Up_Restriction_Use_of_Streets_PROWs_Plan.pdf;



- 4.8_Traffic_Regulation_Measures_Plan A.pdf;
- 6-2_Environmental_Statement_Chapter_11.pdf;
- 6-3_Environmental_Statement_Figures_Figure_2-3.pdf;
- 6-3_Environmental_Statement_Figures_Figure_2-5.pdf;
- 6-3_Environmental_Statement_Figures_Figure_11-2.pdf;
- 6-3_Environmental_Statement_Figures_Figure_11-3.pdf;
- 6-3_Environmental_Statement_Figures_Figure_11-4.pdf;
- 6-3_Environmental_Statement_Figures_Figure_11-5.pdf;
- 6-4_Environmental_Statement_Appendices_Appendix_11-A.pdf;
- 6-4_Environmental_Statement_Appendices_Appendix_11-B.pdf;
- 6-7_Outline_Construction_Traffic_Management_Plan.pdf;
- Appendix 5 Traffic Regulations Measures Plan (Revision 2).pdf;
- National Highways Response.pdf; and
- Phasing Presentation Slides for 21 February 2024 FINAL VERSION.pdf.

2. **KTC Review of Documents**

2.1. For ease of reference, the issues raised by the KTC review are set out in the following table.





Table 2.1 - Review of Land-Based Traffic and Transport ES Documents			
Reference	Issue	Concern/Action	
6.2 ES Chapter 11	Table 11.2 refers to 1993 Institute of Environmental Management and Assessment (IEMA) Guidelines for Environmental Assessment of Traffic and Movement.	These guidelines were superseded in July 2023 and so the latest guidelines have not been used in the assessment dated September 2023. The ES chapter should therefore be reviewed against the latest guidelines and additional assessments undertaken as necessary.	
	Section 11.4 Assessment Methodology, reviews estimated construction traffic flows against existing flows to establish an impact. National Highways has requested that the impact at their junction onto the strategic road network be assessed.	During a site visit in March 2022, KTC noted significant congestion occurring at the East Dock Gate and its interaction with the Queens Road/Laporte Road junction (See Image 2.1 below). The ES does not refer to existing traffic flow conditions and has made no attempt to assess the cumulative impact in this location. APT needs to be satisfied that significant delays will not occur at this junction which would affect its emergency response times.	
	Paragraph 11.4.1 refers to construction commencing in early 2025 with peak flows in late 2026.	How realistic is this timescale and what would be the cumulative impact with IERRT should the construction commencement be delayed?	



	Paragraph 11.6.21 explains how traffic flows from the IERRT Transport Assessment have been used in the assessment. These flows are from surveys in 2021.	In 2021 the Covid-19 pandemic was resulting in many people working from home, and therefore significantly lower traffic levels than normal were common. The ES has not undertaken any surveys to see if the 2021 flows were suppressed and hence unrepresentative baseline conditions have been assessed. This should be reviewed.
6.4 ES Appendix 11B	Table 6 of the cumulative assessment refers to IERRT construction traffic.	What if IERRT operational traffic coincides with peak I-GET construction traffic? This should be assessed.
	In other tables in the cumulative assessment, flows on particular links have been entered as zero due to "insufficient information".	If the links of concern to APT, ie Queens Road/Kings Road/Laporte Road are subject to significant additional cumulative traffic then this should be assessed to establish the impact of the I-GET project.
6.7 Outline Construction Traffic Management Plan	Work No 4 includes a culvert to be constructed under Laporte Road.	Th ES fails to explain if this will require the closure of Laporte Road during the construction of the culvert, and what would be the resulting impact on diverted traffic and delays.
	Works No 9 includes a construction layover, storage, offices and workforce parking.	The impact of the traffic associated with these movements on the Queens Road/Laporte Road junction has not been assessed and, as mentioned earlier, this junction is already subject to congestion associated with the East Dock Gate.



At paragraph 1.7.1 it states that the appointed contractor will prepare a Construction Traffic Management Plan and a Construction Workers Travel Plan.	The appointed contractor should consult APT and also give APT the opportunity to review and comment on the CTMP and CWTP. The appointed contractor needs to properly understand the critical nature of APTs operation.
Large construction components will be transported, presumably from the West Dock Gate, and some will be Abnormal Intervisible Loads (AIL) – Section 4 refers.	The movement of AILs is likely to result in traffic delays and possibly temporary road closures. APT must be consulted on and agree to the detailed traffic management plan prior to any road closures.
The construction of the plant immediately to the south of the APT site (I-GET East) is set to take place in Phase 3 – Years 6 & 7, Phase 4 – Years 9 & 10, and Phase 6 – Years 10 & 11.	No information has been provided on the construction movements associated with these works which could coincide with the IERRT operation. It is unclear if I-GET will be constructed using the access road to be provided to the east or via the East Dock Gate. This should be clarified and, if the latter, the impact should be assessed.
Table 3 suggests that an HGV could carry 40m ³ of gravel, and also a similar volume of cut and fill materials.	40m ³ of gravel will weigh about 67 tonnes which is too heavy for a lorry. As the HGV movements have been calculated from these figures there would appear to be an error which leads to a significant underestimate of HGV movements. This needs to be explained and if necessary, a revised assessment produced.



	At paragraph 3.1.9 temporary signals are proposed on Laporte Road to control the site accesses crossroads.	The impact of these temporary signals, which presumably could be in place for much of the overall 11-year construction period, has not been assessed.
4.8 Traffic Regulation Measures Plan A	This document refers to Temporary Traffic Regulation Orders (TTRO) for stopping up and restricting the use of streets.	APT need to be consulted on any proposed TTRO that will restrict access and have potential to affect its emergency response times.

Image 2.1 - Photograph taken looking towards the East Dock Gate and Laporte Road junction from Queens Road at 09:39 hours on 29th March 2022.



Note: site observations indicate that some vehicles can be stationary at the East Gate for in excess of 50 seconds resulting in a significant queue forming on both Queens Road and Laporte Road. This can result in the Queens Road/Laporte Road junction becoming blocked as shown above.

© Key Transport Consultants Ltd

www.key-transport.com

