

H2Teesside Project

Planning Inspectorate Reference: EN070009

Land within the boroughs of Redcar and Cleveland and Stockton-on-Tees, Teesside and within the borough of Hartlepool, County Durham

The H2 Teesside Order

Document Reference: 8.25.10 Response to ExQ2.14 Socio-economics and Land use, including Human Health and Major Accidents and Disasters

Planning Act 2008



Applicant: H2 Teesside Ltd

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1.0 INTRODUCTION

1.1 Overview

1.1.1 This document has been prepared on behalf of H2 Teesside Limited (the 'Applicant'). It relates to an application (the 'Application') for a Development Consent Order (a 'DCO'), that was submitted to the Secretary of State for Energy Security and Net Zero ('DESNZ') on 25 March 2024, under Section 37 of 'The Planning Act 2008' (the 'PA 2008') in respect of the H2Teesside Project (the 'Proposed Development').

1.1.2 The Application has been accepted for examination. The Examination commenced on 29 August 2024.

1.2 The Purpose and Structure of this document

1.2.1 The purpose of this document is to set out the Applicant's responses to the Examining Authority's ExQ2.14 on Socio-economics and Land use, including Human Health and Major Accidents and Disasters, which were issued on 28 November 2024 [PD-015]. This document contains a table which includes the reference number for each relevant question, the ExA's comments and questions and the Applicant's responses to each of those questions.

Table 1-1: Applicant’s Responses to ExQ2.14 Socio-economics and Land use, including Human Health and Major Accidents and Disasters

EXQ2	QUESTION TO:	QUESTION:	RESPONSE
Q2.14.1	Health and Safety Executive (HSE) and United Kingdom Health Security Agency (UKHSA)	Does the HSE and UKHSA have any comments or observations on the Applicant’s responses set out in Q1.14.5 - Q1.14.8 [REP2-032] and the approach adopted to the assessment of major accidents in the context of the Proposed Development comprising elements of novel technology.	N/A
Q2.14.2	HSE	The draft SoCG between the Applicant and the HSE [REP1-015] sets out the information to be submitted by the Applicant as part of its Control of Major Accidents Hazards (COMAH) notification. Bearing in mind this document is in draft and not yet agreed by either the Applicant or the HSE, the ExA would ask the HSE for any comments or observation on the response provided to date by the Applicant?	N/A
Q2.14.3	Applicant	<p>The Applicant’s response to ExQ1 (Socio Economics and Land Use) [REP2-032] at Q1.14.5 is noted, especially where in relation to the COMAH Safety Report it states “it will demonstrate that major accident hazards and possible major accident scenarios have been identified and that the necessary measures have been taken to prevent such accidents and to limit their consequences for human health and the environment.”</p> <p>The ExA also notes in the same document, the Applicant’s response to Q1.14.6 (ii) where it advises the Safety Report will also need to consider both risks to the Proposed Development from adjacent sites and risks to adjacent sites from the Proposed Development.</p> <p>Bearing this in mind, can the Applicant explain how its responses referred to above address the question raised in Q1.14.6(ii) in respect of how the embedded measures in the design and construction of the Proposed Development will be sufficient to reduce or off-set any increased potential risks associated with major accidents due to the domino group?</p>	<p>In the design process to date, the Applicant has undertaken risk assessments, accounting for HSE’s land use planning methodology, to ensure that the design and construction methodology as presented in the DCO application accounts for known risks.</p> <p>As the project progresses, and other nearby developments are brought forward, risk contours will be compared with existing zones for other COMAH sites to assess the potential for propagation of an accident on another COMAH site within the domino group, or impacts on neighbouring domino sites. The detailed design will consider the need for specific embedded mitigation (e.g. placement of the storage tanks) and other specific mitigation (e.g blast walls) to mitigate any potential risks to domino sites, to be agreed with the Competent Authority under the COMAH Regulations 2015.</p> <p>As noted in Table 4.1 of the Statement of Common Ground with the HSE (REP1-015), <i>“The HSE will consider matters such as the appropriateness of consequence modelling, safe distances/set offs, plant design, clustering and domino effects and the appropriateness of the scenarios provided. It will also consider how any previously granted Hazardous Substances Consent (‘HSC’) or consideration of matters for other projects may be affected by the application of the COMAH Regulations to the Proposed Development.”</i></p> <p>If the Applicant cannot demonstrate to the CA that the risks to domino sites have been reduced to ALARP, the CA can reject the proposed design and effectively refuse commencement of construction until the detailed design can be amended to demonstrate ALARP.</p>
Q2.14.4	Applicant	The ExA notes the Applicant’s response to ExQ1 (Socio Economics and Land Use) [REP2-032] at Q1.14.13 (i) in respect of the assessment of the peak number of workers on site during the construction period for the Proposed Development. Bullet points 1-5 of Q1.14.13(i) set out the factors considered by the Applicant to inform the assessment of the construction phase estimates for the peak number of workers on site. Bearing this in mind, can the Applicant:	i. In developing the construction worker numbers, the Applicant team took account of the size of the Main Site, the length of the pipeline corridors as described in the Pipelines Statement and the potential layout of the Main Site as set out in the Indicative Hydrogen Production Facility and Above Ground Facility Drawing and the parameters for the key facilities set out in the DCO; and combined this with its experience of seeking to comply with the Construction (Design and Management)

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		<ul style="list-style-type: none"> i. signpost in the application documents the primary design information referred to in bullet point number 2 which was used to inform the approximate number of people required and how many people can “fit” in the area to safely construct the plant; ii. signpost in the application documents the data used as the basis of the Industrial Standard Estimators; and iii. signpost where the data from Historical Projects refer to in bullet point 3 can be found in the application documents. 	<p>Regulations 2015 and the Health and Safety at Work Act 1974 on similar sites, to consider what would be a safe peak amount of workers in seeking to build all the different pieces of equipment; catering for matters such as set off distances/buffer zones whilst they are at different stages of development (e.g. for taller structures).</p> <p>ii + iii. The Applicant would note that the reference to ‘Industry Standards: Estimators’ in the response to Q1.14.13(i) (REP2-032) refers to the Estimator job role that makes such estimates. These estimates are derived from factored material quantities and previous experience on projects of a similar nature. In this case they were derived by the Applicant’s pre-FEED contractor from their own database and checked by the Applicant using Compass International Inc benchmarks. This is a commercial product maintained by Compass International Inc so cannot be shared into the Examination.</p> <p>It is noted that for the NZT Project, the slightly larger number of construction workers were derived using a similar approach (including the involvement of the same pre-FEED contractor), and this was accepted by the ExA and SoS without question during NZT’s Examination/Decision.</p>
Q2.14.5	Applicant/ NE	<p>NE in its RR [RR 026], as repeated in its WR [REP2-072] states at ‘NE Key Issue Ref: NE35 <i>“Whilst NE accepted that there is no mitigation for the permanent loss of agricultural land due to permanent development, appropriate mitigation to prevent the potential loss of BMV (Best and Most Versatile) land, including the restoration of disturbed land to the baseline ALC (Agricultural Land Classification) Grade, should be set out in the assessment. This would require a detailed ALC survey of the pipeline routes to inform appropriate restoration. For all areas of agricultural land subject to temporary and permanent loss, in which Post-1988 ALC survey information is not available, an ALC survey should be undertaken...”</i></p> <p><i>The Applicant response to NE35 is set out in its ‘Responses to NE’s RR’ [REP1-007], where the Applicant advised “BMV land across the Proposed Development boundary is limited, with the majority of the Main Site and Connection Corridors classified as Urban and Non-Agricultural. A small portion of the Hydrogen Pipeline Corridor north of the River Tees has land classified as Grade 3, 4 and 5. As a worst case scenario Grade 3 land, at the Cowpen Bewley Replacement Land, is assumed to be Grade 3a, making it BMV land for the purposes of the assessment presented in Chapter 10: Geology, Hydrogeology and Contaminated Land [APP-062].</i></p> <p><i>Taking into account the above, the Applicant does not propose to undertake supplementary ALC surveys of the Proposed Development Site at this time. However, the Applicant recognises the need for careful soil management and handling. The framework CEMP (current version [REP3-004] will be amended to include the production of a Soils Management Plan (SMP), included as part of the Final CEMP, produced prior to construction.”</i></p>	<p>Requirement 15(7) of the draft DCO [REP4-004] requires the supplementary plans (including the Soil Management Plan) stated in Paragraph 2.3.2 of the Framework CEMP [REP3-003] must be submitted to and approved by the relevant planning authority prior to the commencement of construction of the Proposed Development. Please refer to the Applicant’s responses to Deadline 4 submissions (NE35), submitted into the Examination at Deadline 5, for a detailed response on this matter.</p>

EXQ2	QUESTION TO:	QUESTION:	RESPONSE
		<p>Considering the above:</p> <ul style="list-style-type: none"> i. Can the Applicant confirm or signpost the mechanism which will be used to ensure the inclusion of SMP as part of the Final CEMP. ii. Does the NE have any comments or observation on the Applicant's approach and assessment of BMV land across the Proposed Development boundary, as set out above. iii. Does NE have any comments or observation in regard to the Applicants revised ALC maps submitted at DL2 [REP2-017] (ES, Volume II, Figure 10-19 Agricultural Land Classification Rev.1)? 	
Q2.14.6	Applicant/ RCBC	<p>The ExA notes RCBC response to the ExA's ExQ1 at Q1.14.13 and Q1.14.17 [REP2-044], which notes NZT is set to start construction in early 2025 and raises concern as to whether the Tees Valley will be able to provide the volume of construction workers required for major projects starting around the same time. RCBC states that there is a need to have training opportunities in place now for local residents to up skill to access the future construction jobs.</p> <ul style="list-style-type: none"> i. Can the Applicant and RCBC update the ExA on the progress of discussions regarding the above. ii. Can RCBC confirm whether or not it is satisfied that its concerns set out above have been or are being adequately addressed and if so how. 	<p>This matter is now agreed between the two parties. An updated SoCG with RCBC has been submitted into the Examination at Deadline 5. The two parties agreed Requirement 26 'Employment, skills and training plan' of the draft DCO [REP4-004] will provide an appropriate mechanism by which local residents are able to access employment, skills and training opportunities.</p>
Q2.14.7	Applicant/ STBC	<p>STBC in response to the ExA's ExQ1 [AS-033] state at Q1.14.19 that discussions are ongoing regarding the Applicant's 'Essential Mitigation and Enhancement Measures' as set out in Paragraph 18.7 of the ES Chapter 18 (Socio-economics and Land Use) [APP 072]. Can the Applicant and STBC provide the ExA with an update on the progress of these discussions and signpost the mechanism in the draft DCO which secures the 'Essential Mitigation and Enhancement Measures'.</p>	<p>Section 18.7 of Chapter 18 refers to the replacement of the land lost at Cowpen Bewley Woodland Park. This is secured via article 29 of the DCO. The Applicant and STBC have had positive discussions as to the principles of what the layout of the replacement land may look like, but these are likely to continue on past Examination. This is acceptable as ultimate approval will come from STBC of that layout.</p> <p>Section 18.7 also refers to mitigating cumulative impacts. Further to the updated cumulative documentation submitted at Deadline 5, the Applicant has further strengthened the ambit of the proposed working group to deal with these issues in the updated FCEMP submitted at Deadline 5. That group is secured pursuant to Requirement 15 of the DCO, which requires the detailed CEMP to be in substantial accordance with the fCEMP. The set up and on-going development of that group will be a matter of on-going discussion with STBC as the Proposed Development progresses, and more certainty is developed as to the programmes of Other Developments.</p>
Q2.14.8	Applicant	<p>The ExA notes PDT's concerns regarding the proposed crossing of the River Tees and the potential impact the Proposed Development could have on both the existing Riverside Ro-Ro and the proposed Northern Gateway Container Terminal. In regard to the latter development the ExA notes the deep sea terminal which will ultimately</p>	<p>It is first noted that these matters will ultimately be able to be controlled pursuant to the Protective Provisions for PDT's benefit in the DCO.</p>

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		<p>consist of over a kilometre of quay, channel deepening and associated landside infrastructure. It further notes the quay construction will require piles to be driven to significant depth which could impact on any subsurface pipeline infrastructure.</p> <p>Please can the Applicant advise how it intends to ensure there is no conflict between the two developments, especially in relation to the piles and dredge pockets associated with the quay construction and the Applicants pipeline infrastructure, including its method of construction.</p>	<p>It is the intent of the project to install the H2T Tees Crossing within the existing Northern Tees crossing corridor. Seven existing infrastructure crossings of the Tees are present at this location – all subsurface in nature, i.e. below riverbed level. The Applicant’s proposed new crossing is to be below the dredging depth. The Applicant will take account of the proposed pile depths in its detailed design of the river crossing and will discuss these details in a technical meeting with PD Teesport. This H2Teesside tunnel shafts locations, which are onshore north and south of the Tees river, will consider existing and planned infrastructure such as Northern Gateway Container Terminal. The Applicant intends to collaborate with PDT and other landowners by sharing drawings or technical details such that parties can confirm there is no conflict, pursuant to the processes set .</p>