

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: 8.25.8 Response to ExQ2.10 Geology, Hydrogeology and Land Contamination

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 ExQ2.10 on Geology, Hydrogeology and Land Contamination, 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.

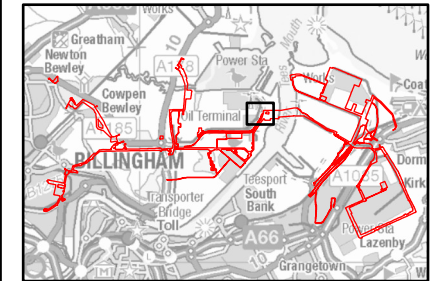
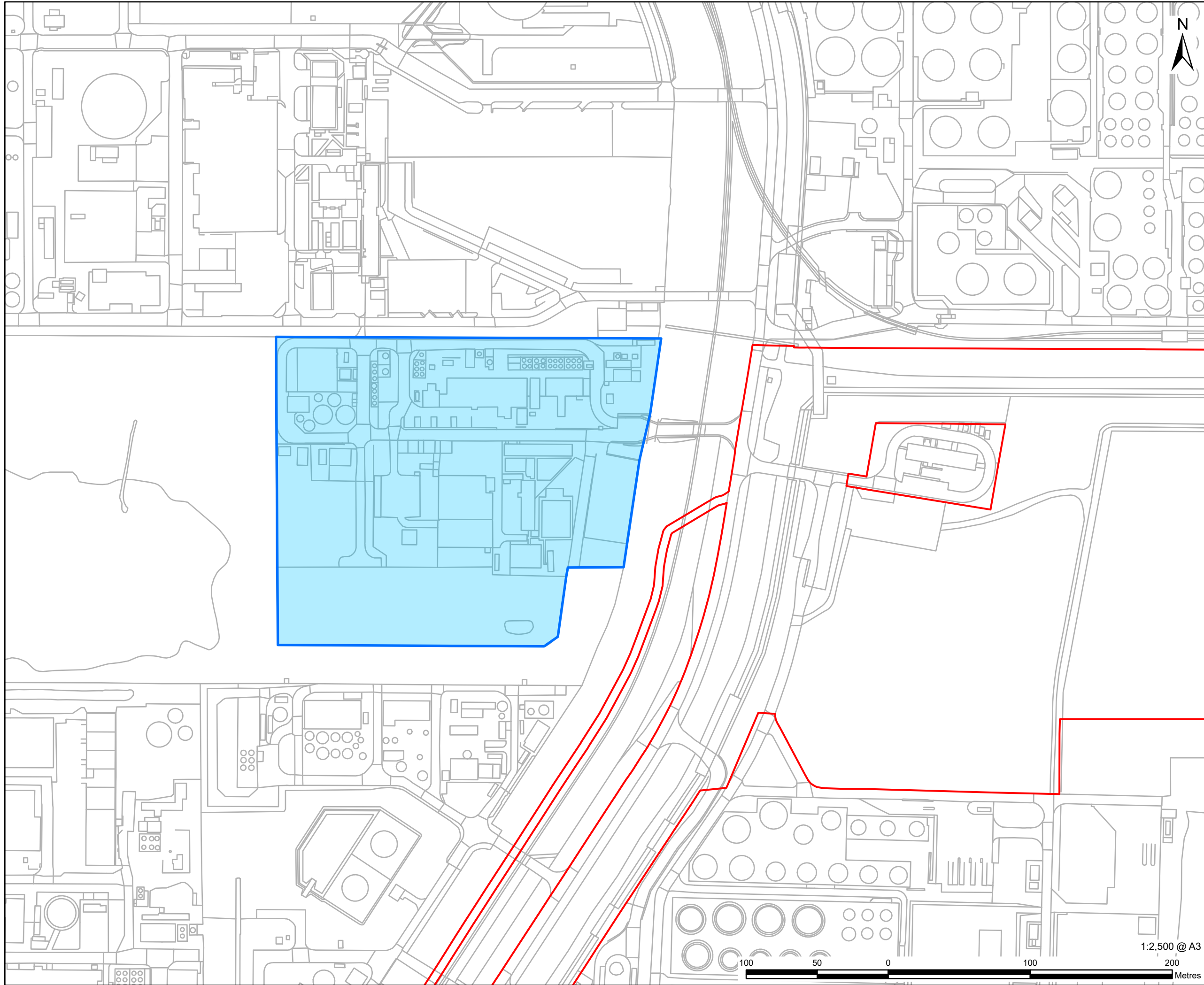
Table 1-1: Applicant’s Responses to ExQ2.10 Geology, Hydrogeology and Land Contamination

EXQ2	QUESTION TO:	QUESTION:	RESPONSE
Q2.10.1	Applicant	<p>The Environment Agency (EA), in its RR [RR-009], has previously referred to land currently being investigated under Part 2A of the Environmental Protection Act 1990. It is noted the EA considers the Applicant’s response to this, as also set out in the Applicant’s ‘Response to ExQ1 (Geology Hydrogeology and Land Contamination) [REP2-028], where it advises “the site is not being investigated under Part 2A” is incorrect. The ExA also notes the response of STG in its ‘Responses to the ExA’s ExQ1’ [REP2-110].</p> <p>Irrespective of the above, the EA have advised that its original response included an incorrect grid reference and this may be the reason for the Applicant’s incorrect response. It advises the correct grid reference for the site, previously known as Seal Sands Chemicals Company (SSC), is NZ 53843 24721 and notes this area is adjacent to Work No. 6A.1 (Hydrogen Distribution Network - Overground and Underground Pipelines) and includes a Part 2A inspection area. It further notes the Applicant’s ‘Response to ExQ1 Geology Hydrogeology and Land Contamination’ [REP2-028] included a list of intrusive Ground Investigations to be completed. However, it advises it is unclear if the area adjacent to the Part 2A inspection site has been included or not.</p> <p>Bearing the above in mind,</p> <ul style="list-style-type: none"> i. Can the Applicant advise whether any of the land being referred to by the EA as “...being investigated under Part 2A of the Environmental Protection Act 1990...” falls within the Order Limits and if so, please signpost the plan which identifies the former SSC land? If no such plan has been provided, please enter such a plan into the Examination. ii. In addition to the above can the Applicant, South Tees Development Corporation and the EA, together with any other relevant Authority/ Body, confirm what discussions have taken place with regard to the land being referred to by the EA as “...being investigated under Part 2A of the Environmental Protection Act 1990.”? iii. If this land does fall within the Order Limits, the ExA would ask the Applicant where within the Application documentation it has assessed any risks and impacts (significant or otherwise) in relation to this land. iv. Where the assessment referred to in iii) above has been undertaken and submitted as part of the Application documentation can the EA, Local Authorities and/ or any other relevant Authority/ Body confirm that the assessment has adequately assess that land in question. Should no such assessment of this land have been submitted can the EA, Local Authorities and/ 	<ul style="list-style-type: none"> i. The Applicant can confirm after seeking further information from STBC and the EA that the Proposed Development does not overlap with any part of the land currently being investigated under Part 2A of the Environmental Protection Act 1990. The Applicant has prepared a plan displaying the Order Limits of the Proposed Development in relation to the investigation area, this can be found at Appendix 1 of this document. ii. Discussions have taken place with the EA and STBC to ascertain if any of the land subject of the Part 2A investigation overlaps with the Proposed Development. STBC has also provided the Applicant with some further information on the Site. This is also reported in the updated SoCG with the EA, submitted into the Examination at Deadline 5. iii. As per the Applicant’s response to i., the Applicant can confirm there is no overlap with the land in question. The Applicant was only made aware of this Part 2A investigation during the Examination and has not assessed any risks and impacts associated with this land in the DCO Application, however, as there is no direct overlap this is not considered relevant. iv. Not applicable to the Applicant. v. As per the Applicant’s response to i., the Applicant has prepared the requested plan, this can be found at Appendix 1 of this document.

EXQ2	QUESTION TO:	QUESTION:	RESPONSE
		<p>or any other relevant Authority/ Bodies advise whether such an assessment should/ should not be undertaken, which takes account of this land?</p> <p>v. Can the Applicant provide a plan that identifies whether the SCC land forms part of the boundary of the Order Limits.</p>	
Q2.10.2	Applicant	<p>From a flood risk perspective, the EA has stated it supports the use of HDD methods, as it will minimise surface disruption as well as ensure that ground levels remain unchanged throughout the process. However, it notes an increase in corridor width could have potential flood risk implications. The EA advises it understands the need for a wider corridor width whilst ground investigation has not been conducted, as it allows for wider flexibility for the location of the drilling path. However, it advises that if the drilling path and related corridor are located near a flood defence, a narrower corridor width would be preferred as it can be more closely managed to ensure no damage or destabilisation to any flood defence infrastructure.</p> <p>The ExA would ask the Applicant to respond to the EAs concerns in this regard and advise how it intends to ensure there is no damage or destabilisation to any flood defence infrastructure resulting from undertaking the HDD or the development in general.</p>	<p>The corridor width and final alignment will be optimised as part of detailed design phase. The flood defence is similar across the entire width of the corridor, hence once it is narrowed it is not expected to change the philosophy.</p> <p>On potential damage and destabilisation, the HDD will be designed by a competent engineering contractor and be carried out by an HDD company with experience in projects of similar scope. As part of design, existing features like flood defences will be considered alongside geotechnical information on soil and water levels. The depth of the HDD will be dictated by the Greatham Creek riverbed depth to avoid breakout of drilling mud through the riverbed, and this depth should be such that settlement at the surface (including of flood defences) will be minimal. As detailed in the CEMP, this depth is >10m.</p> <p>Furthermore, it should be noted that the location of the exit of the HDD to the south of Greatham Creek is offset approximately 100m, placing it approximately 30m south of the flood defence levee on the south bank of the Creek.</p> <p>As per the fCEMP, regular monitoring will be carried out during HDD activities.</p>
Q2.10.3	Applicant	<p>The EA advise that final drill routes and methods should be included in the Construction Environment Management Plan or other relevant document and shared with them for approval. Please confirm how you will comply with this request from the EA and how it will be secured in the draft DCO.</p>	<p>The Applicant acknowledges the Environment Agency’s (EA) advice on this point. However, there should be no need for the final drill routes and methods to be included in the Construction Environmental Management Plan or any other relevant documents because this information would be shared by the Applicant with the EA pursuant to their Protective Provisions, a draft version of which is set out in Schedule 22 of the draft Development Consent Order (Document Ref: 4.1).</p> <p>The current draft EA protective provisions at paragraph 2(1) require the Applicant to submit (and the EA to approve) plans of a <i>“specified work and such further particulars available to it as the Agency may with 28 days of the receipt of the plans reasonably request”</i>.</p> <p><i>“Specified work”</i> is defined in the protective provisions as <i>“any work or operation authorised by this Order as is in, on, under, over or within–</i></p> <p><i>“8 metres of the base of a remote defence...</i></p> <p><i>“16 metres of a drainage work involving a tidal main river or 8 metres of a drainage work involving a non-tidal main river;”</i> or</p> <p><i>“Any distance of a drainage work and is otherwise likely to affect any drainage work... affect the flow, purity or quality of water in any main river or other surface waters; affect conservation, distribution or use of water resources; or... conservation value of the main river and habitats in its immediate vicinity”</i>.</p>

EXQ2	QUESTION TO:	QUESTION:	RESPONSE
Q2.10.4	EA	<p>The Applicant provided an update to the ExA during ISH2 (DCO) with regard to its Application for an EP. This information is reflective of the position set out in the draft SoCG [REP4-019] between the Applicant and the EA, and in subsequent response submitted by the Applicant. As such the ExA would seek an update in regard to the status of the EP from the EA, which confirms the current position regarding EP, including whether the EP Application has now been accepted by the EA as duly made. If not yet accepted as 'duly made' please advise what information/ details remain outstanding.</p>	<p>The Application for an Environmental Permit was duly made on 6 December 2024.</p>
Q2.10.5	Applicant	<p>The MMO in its DL4 submission [REP4-026] advises any remedial action required below Mean High Water Springs, will need to be communicated to the MMO. It also advises that the following should be included in the Response Plan to ensure that any spills are appropriately recorded and managed to minimise the risk to sensitive receptors and the marine environment:</p> <p><i>“Any oil, fuel or chemical spill within the marine environment must be reported to the MMO Marine Pollution Response Team within 12 hours.</i></p> <p><i>Within office hours: 0300 200 2024</i></p> <p><i>Outside office hours: 07770 977 825</i></p> <p><i>At all times if other numbers are unavailable: 0345 051 8486</i></p> <p><i>Email: dispersants@marinemanagement.org.uk”</i></p> <p>Additionally, the MMO advises there may be licence implications for any works undertaken below Mean High Water Springs if there is no Deemed Marine Licence as part of the Project.</p> <p>Please could the Applicant advise how it intends to address these comments and ensure that any oil, fuel or chemical spill within the marine environment is notified to the MMO and appropriate licences are sought from them, especially in the absence of a Deemed Marine Licence.</p>	<p>The Applicant refers the ExA to the Applicant’s Responses to D4 submissions (Document Reference where the Applicant has provided a response on this matter to the MMO (See Table 4-1). The Applicant has updated the fCEMP at Deadline 5 in relation to this matter also.</p> <p>The Applicant is confident the Proposed Development will be able to rely on the exemption for Bored Tunnels in the Marine Licencing (Exempted Activities) Order 2011 in place of a Deemed Marine Licence and will be able to fulfil the conditions of this exemption, particularly Condition 2 and is in discussions with NE on this point – noting that the Condition relates only to the activities to which the Exemption applies namely the drilling activity directly below the bed of the river (Mean High Water Springs), not any other aspect of the Proposed Development.</p>
Q2.10.6	Applicant	<p>The EA’s DL4 response [REP4-025] is noted. Whilst the EA have commented on a number of the Applicant’s previous responses made at DL3, the ExA specifically notes the EA’s comments regarding EA8: Benzo (g,h, i) – perylene. The ExA would ask for a full and considered justification to be submitted that sets out why location D was chosen to represent the ambient concentration, as opposed to location B that has the highest maximum concentration. The ExA would also request a full and considered explanation as to why the concentration of benzo(g,h,i)-perylene is expected to increase within the two deepest water layers if the plume is buoyant.</p>	<p>The Applicant refers the ExA to the Applicant’s Responses to D4 submissions (Document reference 8.26) submitted at Deadline 5, where the Applicant has provided a response on this matter to the EA (See Table 3-1)</p>

APPENDIX 1: THE ORDER LIMITS OF THE PROPOSED DEVELOPMENT IN RELATION TO THE INVESTIGATION AREA



NOTES
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This plan has been produced in response to Q2.10.1 of the ExA's Second Round of Written Questions and presents the Proposed Development's Order Limits in relation to the adjacent Site subject to a Part 2A Investigation under the Environmental Protection Act 1990

ISSUE PURPOSE
DCO Examination - Deadline 5

PROJECT NUMBER
60689030

FIGURE TITLE
Proposed Development in relation to the Part 2A Site Investigation Area

1:2,500 @ A3
100 50 0 100 200 Metres

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