

Viking CCS Pipeline

8.9 Draft Statement of Common Ground – Environment Agency

Document Reference: EN070008/EXAM/8.9

Applicant: Chrysaor Production (U.K.) Limited,
a Harbour Energy Company
PINS Reference: EN070008
Planning Act 2008 (as amended)
The Infrastructure Planning (Applications: Prescribed Forms
and Procedure) Regulations 2009 - Regulation 5(2)(q)
Date: April 2024

PINS Reference	Document Reference	Document Revision	Date
EN070008	EN070008/EXAM/8.9	Version 1	April 2024

Prepared by	Verified by	Approved by
NW	MW	NP
Principal EIA Consultant	EIA Technical Director	EIA Technical Director

Prepared by:

AECOM Limited
 Exchange Station
 Tithebarn Street
 Liverpool
 Merseyside
 L2 2QP

This Draft Statement of Common Ground has been agreed between Chrysaor Production (UK) Limited and the Environment Agency on the day specified below

Signed:

Print Name:

Job Title:

Date:

Duly Authorised for and on behalf of Environment Agency

Signed:

Print Name:

Job Title:

Date:

Duly Authorised for and on behalf of Chrysaor Production (UK) Limited

Table of Contents

1	Introduction.....	1-1
1.1	Overview.....	1-1
1.2	The Role of the Environment Agency	1-1
1.3	Purpose of this Statement of Common Ground	1-2
1.4	Status of this Statement of Common Ground	1-2
2	Summary of Consultation and Discussions	2-3
3	Position of the Parties.....	3-5
4	References	4-23

Tables

Table 2-1	Record of meetings and correspondence with Environment Agency.	2-3
Table 3-1	Position of the Parties.....	3-7

1 Introduction

1.1 Overview

- 1.1.1 This Statement of Common Ground (SoCG) has been prepared by Chrysaor Production (UK) Ltd (the 'Applicant') in conjunction with the Environment Agency in respect of the Viking CCS Pipeline project (the 'Proposed Development').
- 1.1.2 The SoCG sets out the matters of agreement between the Applicant and the Environment Agency and also explains those matters which, at the time of writing, remain unresolved between the parties. The agreements to date have been reached through consultation and continuing discussions between the parties through online meetings.

1.2 The Role of the Environment Agency

- 1.2.1 The Environment Agency regulates certain activities that have the potential to harm the environment and people. It decides if relevant environmental permits and other consents and licences should be issued and, if so, what conditions should be applied. It monitors compliance with the permit / licence conditions and takes enforcement action if appropriate.
- 1.2.2 The Environment Agency's regulatory, licensing and advisory powers and duties derive (inter alia) from key Acts and Regulations, including:
- Environment Act 1995;
 - Environmental Permitting (England & Wales) Regulations 2016;
 - Water Resources Act 1991;
 - Flood and Water Management Act 2010;
 - Salmon and Freshwater Fisheries Act 1975 and Keeping and Introduction of Fish Regulations 2015;
 - The Planning Act 2008 (the PA2008) and secondary legislation made under the PA2008;
 - The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017; and
 - Habitats Regulations.
- 1.2.3 The Environmental Permitting (England and Wales) Regulations 2016 require operators of certain facilities, which could harm the environment or human health, to obtain permits from the Environment Agency in addition to the DCO.
- 1.2.4 The Environment Agency's environmental permits cover:
- Industry regulation;
 - Waste management (waste treatment, recovery or disposal operations);
 - Discharges to surface water;
 - Groundwater activities;
 - Radioactive substances activities;
 - Flood risk activities (for example – placing structures in, under or over a main river and development close to main rivers and flood defences).

1.3 Purpose of this Statement of Common Ground

- 1.3.1 The purpose of this document is to summarise the agreements reached between the parties on matters relevant to the examination of the application and to assist the Examining Authority ('ExA'). It also sets out the matters that remain unresolved at the time of writing, but which both parties are working positively toward resolving. As such, it is expected that further iterations of the SoCG will be submitted to the ExA throughout the Examination and prior to the making of any Development Consent Order ('DCO') for the Proposed Development.
- 1.3.2 The SoCG has been prepared with regard to the guidance in 'Planning Act 2008: examination of applications for development consent' (Department for Communities and Local Government, March 2015).
- 1.3.3 The remainder of this SoCG is structured as follows:
- Section 2 – Summary of consultation and discussions; and
 - Section 3 - Position of the parties

1.4 Status of this Statement of Common Ground

- 1.4.1 This SoCG is currently in draft form.

2 Summary of Consultation and Discussions

Introduction

2.1.1 In addition to the consultation undertaken as part of statutory consultation, there have been a number of meetings and correspondence relating to the Proposed Development. Details of various meetings and key correspondence are set out in Table 2-1 Record of meetings and correspondence with Environment Agency.

Table 2-1 Record of meetings and correspondence with Environment Agency.

Prescribed body	Date of meeting/ correspondence	Description of meeting/correspondence
Environment Agency	17 December 2021	Meeting to discuss flood risk and water resource matters.
	Early 2022	Meeting to discuss flood risk and water resource matters.
	20 February 2022	EA provided an EIA Scoping response
	August 2022	Email correspondence providing a summary update of the scheme, including revisions to the route following non-statutory consultation.
	October 2022	Email correspondence regarding the project’s name change.
	23 November 2022	Meeting to discuss flood risk and water resource matters. Project team provided an update on the changes to the project since scoping and non-statutory consultation had taken place.
	22 December 2022	EA provided a response to the Section 42 consultation
	February 2023	Email correspondence regarding EIR data requests.
	June 2023	Email correspondence regarding approach for preliminary hydrogeological risk assessment and guidance on the potential need for abstraction licensing for dewatering activities.
	29 June 2023	Meeting to discuss flood risk assessment matters, and in particular a request for the Environment Agency to re-check breach levels that appeared too high. The EA also asked whether they would be able to review the draft Flood Risk Assessment (FRA) before submission, and the project team responded that the current scheduled meant that this was unlikely.
	5 September 2023	Additional information was provided regarding the proposed replacement of the dune isolation valve and its electrical connection.
	14 September 2023	A meeting was held with the EA so that the AECOM hydrology team could provide an overview of the findings of the FRA.

Prescribed body	Date of meeting/ correspondence	Description of meeting/correspondence
	7 March 2024	Meeting to discuss points raised in the Environment Agency’s Relevant Representation

3 Position of the Parties

3.1.1 Table 3-1 sets out the position of the parties relating to the following topics:

- **Geology and Hydrogeology** – including groundwater. The principal application documents are:
 - Environmental Statement Volume II Chapter 9: Geology and Hydrogeology (APP-051)
 - Appendix 9-3 – Hydrogeological Risk Assessment (APP-094)
- **Water Environment** – including surface water quantity and quality. The principal application documents are:
 - Environmental Statement Volume II Chapter 11: Water Environment (APP-053)
 - Environmental Statement Volume II Chapter 20: Major Accidents and Disasters (APP-061)
 - Appendix 11.4 - WFD Assessment (APP-100)
 - Appendix 11.5 - Flood Risk Assessment (APP-101)
 - Appendix 3.2 – Crossing Schedule (Application Document APP-069)
- **Flood Risk Assessment** Appendix 11.5 - Flood Risk Assessment (APP-101)
- **Major Accidents and Disasters** – 6.2.19 Environmental Statement - Volume II - Chapter 19: Major Accidents and Disasters (APP-061)
- **Materials and Waste** – 6.2.18 Environmental Statement - Volume II - Chapter 18: Materials and Waste (APP-060)
- **Draft Construction Environmental Management Plan** – 6.4.3.1 Environmental Statement - Volume IV - Appendix 3-1: Draft Construction Environmental Management Plan (CEMP) (APP-068)
- **Water Framework Directive Assessment** – 6.4.11.4 Environmental Statement - Volume IV - Appendix 11-4: Water Framework Directive (WFD) Assessment (APP-100)

3.1.2 To provide clarity, each of the matters for which a position has been attributed have been colour coded as follows:

Agreed	The matter is agreed between the parties, or there are no significant disagreement such that the matter is considered closed.
Not agreed - no material impact	The matter is not agreed between the parties; however the outcome of the approach taken by the Applicant or the Environment Agency is not considered to result in a material impact to the assessment conclusions. Discussions on this matter have concluded.
In discussion	This matter is neither 'agreed' or 'not agreed'. Technical work is being undertaken with the aim of achieving agreement, though the risk of disagreement remains.
Not agreed	The matter is not agreed between the parties and the outcome of the approach taken by the Applicant or the Environment Agency is considered to result in a materially different impact to the assessment conclusions.

Table 3-1 Position of the Parties

ID	Matter	Detail	Related documents and their references	Comments from the Parties	Position
Draft DCO					
EA1	Articles and Schedules	The wording of the Articles and Schedules in the draft DCO [AS-008] is appropriate.	Draft DCO [AS-008] Environment Agency's Relevant Representation [RR-034]	<p>Environment Agency: <i>[Comments provided on the draft DCO in section 3 of the Relevant Representation [RR-034]]</i></p> <p>Applicant: Detailed responses to each of the updates proposed by the Environment Agency are included in the Applicant's response to Relevant Representations submitted at Deadline 1. The Applicant has agreed all updates proposed and has updated the Draft DCO accordingly..</p>	In Discussion
EA2	Protective Provisions	The protective provisions included in Part 7, Schedule 9 of the draft DCO (Revision A) [AS-008] ensure that appropriate protection and safeguarding measures for the Environment Agency's interests are in place.	Draft DCO [AS-008]	<p>Applicant: Negotiation of protective provisions are ongoing and the Applicant hopes to agree these with the Environment Agency.</p> <p>Environment Agency: Negotiation of protective provisions is ongoing and the Environment Agency hopes to agree these during the Examination period. We will not agree to the disapplication of legislation under Article 36 until protective provisions are agreed.</p>	In Discussion
Policy and Legislation					
EA5	Policy and Legislation	The relevant national policies and appropriate legislative framework with respect to matters relating to Environment Agency duties have been accurately reported.	Planning, Design and Access Statement (PDAS) [APP-129]	<p>Environment Agency: The EA considers the WFD as currently drafted is not adequate, and the EA wish to make a holding objection to the application as the assessment is not sufficient for us to advise on the project's compliance with the relevant River Basin Management Plans and the WFD, as required by the relevant National Planning Policies</p> <p>The EA considers the FRA as currently drafted is not adequate, and the EA wish to make a holding objection to the application as the assessment is not sufficient for us to advise on the project's compliance with the relevant National Planning Policies requirements on flood risk and safety.</p> <p>Applicant: The Applicant notes the EA's holding objection and will continue to work with the EA to provide further detail where requested. Updates to both the WFD assessment and FRA will be provided at Deadline 2.</p>	In Discussion

ID	Matter	Detail	Related documents and their references	Comments from the Parties	Position
Description of the Proposed Development					
EA6	Project Description	The description of the Proposed Development provides sufficient information for the purposes of assessment.	Chapter 3 Description of the Proposed Development [APP-045]	<p>Environment Agency: The EA has reviewed this chapter and considers it satisfactory. No further comments.</p> <p>Applicant: Noted, and no further action required.</p>	Agreed
Geology and Hydrogeology					
EA7	Assessment methodology	The scope of the assessment and assessment methodology in chapter 9 Geology and Hydrogeology of the Environmental Statement are appropriate.	Chapter 9 Geology and Hydrogeology [APP-051]	<p>Environment Agency: The scope and assessment methodology has developed through discussions in meetings and information provided via email; this is now considered to be appropriate, as outlined in Chapter 9.Applicant: Agreed</p>	Agreed
EA8	Data collection, methods, baseline data and the identification and sensitivity of relevant features and receptors	The baseline information used in the assessment and presented in Chapter 9 Geology and Hydrogeology is appropriate for the purposes of assessment. The sensitivity of receptors presented in Chapter 9 Geology and Hydrogeology are appropriate and the relevant receptors have been identified within the study area.	<p>Chapter 9 Geology and Hydrogeology [APP-051]</p> <p>Appendix E to the Consultation Report [APP-039] providing the Statutory Consultation Responses.</p>	<p>Environment Agency: Agrees in principle following the corrections/adjustments made to hydrogeological and sensitivity classifications, and confirmation that the remediation of the Theddlethorpe and Immingham facilities will be secured prior to development through the lease agreement.</p> <p>Applicant: Noted, and no further action required.</p>	Agreed
EA9	Assessment findings	The findings of the Potential Impacts and Assessment of Effects in chapter 9 Geology and Hydrogeology [APP-051] of the Environmental Statement are appropriate.	Chapter 9 Geology and Hydrogeology [APP-051]	<p>Environment Agency: The assessment ratings as far as they relate to groundwater and hydrogeology appears appropriate; human health and AGIs are outside of the Environment Agency's remit.</p> <p>Applicant: Agreed</p>	Agreed
EA10	Assessment findings	The Additional Mitigation and Enhancement Measures set out in chapter 9 Geology and Hydrogeology [APP-051] of the Environmental Statement are appropriate.	Chapter 9 Geology and Hydrogeology [APP-051]	<p>Environment Agency: The hydrogeological risks will be controlled by adherence to the CEMP, the proposed Inspection and Discovery Strategy and development of detailed Hydrogeological Risk Assessments where appropriate (in consultation with ourselves).</p> <p>Applicant: Agreed</p>	In Discussion
EA12	Securing mitigation	All relevant mitigation measures specified in chapter 9 Geology and Hydrogeology [APP-051] of the Environmental Statement are adequately secured through the draft Construction Environmental Management Plan CEMP [APP-068]. The proposed mitigation is appropriate for managing construction and post construction	<p>Chapter 9 Geology and Hydrogeology [APP-051]</p> <p>Construction Environmental Management Plan. [APP-068]</p>	<p>Environment Agency: Agrees in principle, other than:</p> <ul style="list-style-type: none"> EA would like the applicant to note that the importance of the need for an abstraction licence should be determined at an early stage. This should 	In Discussion

ID	Matter	Detail	Related documents and their references	Comments from the Parties	Position
		impacts from the Project. Requirement 5 of the DCO [APP-006] requires that the CEMP must be prepared and approved before commencement of development.	Draft DCO [AP-006]	<p>be included in the CEMP and commitments E3 and E28.</p> <ul style="list-style-type: none"> Further consultation regarding control measures to reduce the risk of groundwater contamination, losses through artesian flow and management of dewatering is required for HDD or piling which will exceed 10m in depth, and should be the focus of further detailed hydrogeological risk assessment. <p>Applicant: Agreed and noted that the Environment Agency request to be consulted regarding further detailed hydrogeological assessments, the discovery strategy, remediation assessments, control measures for HDD or piling which will exceed 10m in depth, and a specific consultee for the contamination inspection and discovery strategy in regards to the discharge of Requirements 5 and 9.</p>	
EA13	Assessment findings	The Residual Effects and Cumulative Effects set out in chapter 9 Geology and Hydrogeology [APP-051] of the Environmental Statement are appropriate.	Chapter 9 Geology and Hydrogeology [APP-051]	<p>Environment Agency: Consideration of potential contamination, artesian conditions and the need for dewatering are key, and seem appropriate, provided provision is included in the works programme for licensing timescales and potential cessation of work due to discovery of unsuspected contamination. Our concerns mainly focus on the construction phase; the operational phase is not likely to pose as many risks to groundwater.</p> <p>Applicant: Agreed</p>	Agreed
Hydrogeological Risk Assessment					
EA14	Assessment methodology	The scope of the assessment methodology in the Hydrogeological Risk Assessment [APP-094] of the Environmental Statement is appropriate	Appendix 9-3: Hydrogeological Risk Assessment [APP-094]	<p>Environment Agency: <i>[Comment to be inserted by Environment Agency]</i></p> <p>Applicant: Agreed</p>	In Discussion
EA15	Data collection, methods, baseline data and the identification and sensitivity of relevant features and receptors	The approach used for the Hydrogeological Risk Assessment follows standard best practice for projects of this nature. The baseline data, survey methods and assessment methodology used are appropriate and follow standard guidelines.	<p>Appendix E to the Consultation Report [APP-039] providing the Statutory Consultation Responses.</p> <p>Appendix 9-3: Hydrogeological Risk Assessment [APP-094]</p>	<p>Environment Agency: Agree in principle, other than:</p> <ul style="list-style-type: none"> Section 1.3.2 states the groundwater safeguard zones are meant to be designated in Figures 1.2 and 1.3; these are not evident in the diagrams. Sections 1.3.18, 39, 58, 77 and 97 do not reference potential additional (unidentified) sources of pollution including migration of contaminants already present within the ground due to historical use, mobilised by construction. Additional pathways which are not referenced include deeper drilling (HDD) or piling. 	In Discussion

ID	Matter	Detail	Related documents and their references	Comments from the Parties	Position
				<p>Applicant: Noted, and the error in Section 1.3.2 was due to a figure update between review phases. Updated figures can be provided if required, and potential additional (unidentified) sources of pollution can be added to the assessment, but we do not believe this addition changes the overall conclusions of the assessment. We welcome further discussion on the requirements for control measures for HDD / piling.</p>	
EA16	Assessment findings	The findings of the Hydrogeological Risk Assessment in Appendix 9-3 of the Environmental Statement [APP-094] are appropriate in identifying and assessing the hydrogeological risks.	Appendix 9-3: Hydrogeological Risk Assessment [APP-094]	<p>Environment Agency: Agree in principle, other than:</p> <ul style="list-style-type: none"> Sections 1.3.13 and 34 states that HDD may extend to 20m depth – can the applicant please confirm if this is correct? This seems to contradict other text. If it is correct, the risk is less about contaminants entering the chalk bedrock, but more about managing the uncontrolled artesian groundwater pressure – this needs to be fully considered and addressed in tables 4 and 10. <p>Confirmation that additional consultation would be welcomed for drilling greater than a depth of 10m within the chalk bedrock.</p> <p>Applicant: We agree to the point on additional consultation. There is a potential that HDD may extend to 20m depth in places, and the wording of the hydrogeological risk assessment can be amended to make this clearer. However further design is currently underway for the HDDs and any updates will be provided in due course. Following ground investigation to confirm the depth to chalk in these areas, the hydrogeological risk assessment will be updated to consider risks associated with uncontrolled groundwater pressure in the chalk.</p>	In Discussion
EA17	Assessment findings	The Additional Mitigation and Enhancement Measures set out the Hydrogeological Risk Assessment in Appendix 9-3 of the Environmental Statement [APP-094] are appropriate.	Appendix 9-3: Hydrogeological Risk Assessment [APP-094]	<p>Environment Agency: These align with those outlined in the main Chapter 9 report, so appear to be appropriate.</p> <p>Applicant: Agreed</p>	Agreed
EA18	Securing mitigation	All relevant mitigation measures specified in Appendix 9-3 Hydrogeological Risk Assessment of the Environmental Statement [APP-094] are adequately secured through the draft Construction Environmental Management Plan CEMP [APP-068] . The proposed mitigation is appropriate for managing construction and post construction	Appendix 9-3: Hydrogeological Risk Assessment [APP-094] Construction Environmental Management Plan. [APP-068]	<p>Environment Agency: Agrees in principle, other than:</p> <ul style="list-style-type: none"> EA to be consulted when updating the Hydrogeological Risk Assessment, secured through E3 in the draft CEMP. 	Agreed

ID	Matter	Detail	Related documents and their references	Comments from the Parties	Position
		impacts from the Project. Requirement 5 of the DCO [AS-008] requires that the CEMP must be prepared and approved before commencement of development.	Draft DCO [AS-008]	<ul style="list-style-type: none"> Dewatering plan should be developed with regard to all licensing requirements <p>Applicant: We agree to the additional points and note the request to be consulted on future updates to the hydrogeological risk assessment.</p>	
Water Environment					
EA20	Assessment methodology	The scope of the assessment methodology in chapter 11 – Water Environment of the Environmental Statement [APP-053] is appropriate.	Chapter 11 Water Environment [APP-053]	<p>Environment Agency: <i>[Comment to be inserted by Environment Agency]</i></p> <p>Applicant: Agreed</p>	In Discussion
EA21	Data collection, methods, baseline data and the identification and sensitivity of relevant features and receptors	<p>The approach used for the Water Environment Assessment follows standard best practice for projects of this nature. The baseline data used are appropriate and follow standard guidelines.</p> <p>The sensitivity of receptors presented in the Water Environment Assessment are appropriate and the relevant receptors have been identified within the study area.</p>	<p>Chapter 11 Water Environment [APP-053]</p> <p>Appendix E to the Consultation Report [APP-039] providing the Statutory Consultation Responses.</p>	<p>Environment Agency: Agree in principle, other than:</p> <ul style="list-style-type: none"> Paragraph 11.5.67 – the definitions shown in this paragraph are incorrect Table 11-16 <ul style="list-style-type: none"> The level of flood risk is unclear as this paragraph states average breach depths rather than potential maximum breach depths (2006 0.5% and 0.1% breach maximum depths are greater). Climate change: the level of flood risk is unclear as this paragraph states average breach depths rather than potential maximum breach depths (2006 0.5% and 0.1% breach maximum depths are greater). Table 11-17 <ul style="list-style-type: none"> Fluvial: the ‘Comments’ section refers to Ref 1 and Figure 2 - should this refer to Figure 11.41 and Figure 11-7 respectively? Table 11-17, Table 11-18 and Table 11-19 <ul style="list-style-type: none"> Fluvial: There are also non-main rivers crossings that lie within Flood Zone 2 and 3. These sections also contain an incorrect definition of fluvial Flood Zone 2. Climate change is unlikely to result in an increased risk of flooding from all sources, not just groundwater Table 11-20 – missing “Hold the Line/Managed Realignment” policy in the long term (from 2055-2105) between Theddlethorpe St Helen to Gibraltar Point. Although this epoch is beyond the stated lifetime of this Proposed Development, it is something to be aware of if the operational life of the pipeline is extended. 	In Discussion

ID	Matter	Detail	Related documents and their references	Comments from the Parties	Position
				<ul style="list-style-type: none"> Flood risk importance is valued as medium, however there are instances where the Proposed Development is close to development of a higher vulnerability, for example, residential properties. <p>Applicant: We acknowledge the Environment Agency’s comments related to the flood risk and agree to update the report to address any issues with references, definitions, terminology and policy inclusions. We would welcome a discussion in relation to the tidal breach depths, including climate change allowances, to ensure that the assessment is robust and realistic in addressing potential breaches of the tidal defences. In addition, we would welcome a discussion on the sensitivity of flood risk receptors.</p>	
EA22	Assessment findings	The findings of the assessment in chapter 11 – Water Environment of the Environmental Statement [APP-053] during construction, operation and decommissioning are appropriate.	Chapter 11 – Water Environment of the Environmental Statement [APP-053]	<p>Environment Agency: <i>[Comment to be inserted by Environment Agency]</i></p> <p>Applicant:</p>	In Discussion
EA23	Assessment findings	The Additional Mitigation and Enhancement Measures set out chapter 11 – Water Environment of the Environmental Statement [APP-053] are appropriate.	Chapter 11 – Water Environment of the Environmental Statement [APP-053]	<p>Environment Agency: <i>[Comment to be inserted by Environment Agency]</i></p> <p>Applicant: Agreed</p>	In Discussion
EA24	Securing mitigation	All relevant mitigation measures specified in chapter 11 – Water Environment of the Environmental Statement [APP-053] are adequately secured through the draft Construction Environmental Management Plan CEMP [APP-068] . The proposed mitigation is appropriate for managing construction and post construction impacts from the Project. Requirement 5 of the DCO [AS-008] requires that the CEMP must be prepared and approved before commencement of development.	<p>Chapter 11 – Water Environment of the Environmental Statement [APP-053]</p> <p>Construction Environmental Management Plan. [APP-068]</p> <p>Draft DCO [AS-008]</p>	<p>Environment Agency: Agree in principle, other than:</p> <ul style="list-style-type: none"> Decommissioning Strategy is agreed providing the EA is added as a specific consultee Chapter 11 refers to the likelihood of a breach occurring as being very low and in the event of a breach the site will not be operational. We would highlight that the EA cannot provide prior warning of a breach. In the event of a breach, the consequences are likely to be significant given the location of the Immingham and Theddlethorpe facilities. Emergency plans and shutdown procedures should be considered further to ensure that the development can either remain operational or can be brought back online after flooding and those working on the sites, remain safe. This will be a key part of the flood risk mitigation with respect to the safety of people and the recoverability of the site. Advise the applicant that the temporary crossing of the main rivers must not be flumed. 	In Discussion

ID	Matter	Detail	Related documents and their references	Comments from the Parties	Position
				<p>Applicant: We acknowledge your comments and agree to update the report to address any issues with references and terminology. We would welcome a discussion in relation to the Emergency Plans. In relation to the application of temporary crossings of main rivers, we agree with this statement, and this is included in the embedded mitigation (Table 11-22, Construction – General), and in the crossing schedule.</p>	
EA25	Assessment findings	The Residual Effects and Cumulative Effects set out in chapter 11 – Water Environment of the Environmental Statement [APP-053] are appropriate.	Chapter 11 – Water Environment of the Environmental Statement [APP-053]	<p>Environment Agency: <i>[Comment to be inserted by Environment Agency]</i></p> <p>Applicant: Agreed</p>	In Discussion
Flood Risk Assessment					
EA26	Assessment methodology	The scope of the assessment methodology in Appendix 11-5: Flood Risk Assessment of the Environmental Statement [APP-101] is appropriate.	Appendix 11-5: Flood Risk Assessment of the Environmental Statement [APP-101]	<p>Environment Agency: Agree, however we require further detail to be added and confirmed within the FRA, as detailed further below.</p> <p>Applicant: Agreed – the FRA [APP-101] will be updated at Deadline 2</p>	In Discussion
EA27	Data collection, methods, baseline data and the identification and sensitivity of relevant features and receptors	The baseline information used in the assessment for the Flood Risk Assessment is appropriate for the purposes of assessment. The sensitivity and types of receptors used in the Flood Risk Assessment are appropriate, and the relevant receptors have been identified within the study area.	Appendix 11-5: Flood Risk Assessment of the Environmental Statement [APP-101]	<p>Environment Agency: In line with flood risk policy, flood risk has to be assessed for a lifetime of 75 years. The FRA must assess the impacts of land raising/storage on the displacement of floodwater from main river and non-main river sources and whether any flood plain compensatory storage is required. We would recommend that compounds, storage areas and stockpiles be outside of fluvial flood areas. The FRA must also assess the impacts on the tidal floodplain, particularly with regard to flood flow routes, to demonstrate that the Proposed Development will not increase flood risk to third parties, by deflecting flood water.</p> <p>Applicant: We will provide an update to the Flood Risk Assessment [APP-101] at Deadline 2, which will seek to address these points.</p>	In Discussion
EA28	Climate Change	That the approach to be taken to considering the effects of climate change on flood risk is appropriate.	Appendix 11-5: Flood Risk Assessment of the Environmental Statement [APP-101]	<p>Environment Agency: The FRA uses the average breach depths for the site, which may result in potential flood depths not being mitigated (the maximum breach depths are greater). The 2115 0.1% breach depths and the critical flood level</p>	In Discussion

ID	Matter	Detail	Related documents and their references	Comments from the Parties	Position
				<p>should be confirmed for both the Immingham Facility and Theddlethorpe Facility to ensure that development remains operational or shuts down during a flood.</p> <p>Applicant: We will provide an update to the Flood Risk Assessment [APP-101] at Deadline 2, which will seek to address these points.</p>	
EA29	Assessment findings	The findings of the Potential Impacts and Assessment of Effects in the Flood Risk Assessment [APP-101] of the Environmental Statement are appropriate in assessing the potential flood risks related to the Proposed Development.	Appendix 11-5: Flood Risk Assessment of the Environmental Statement [APP-101]	<p>Environment Agency: FRA does not adequately consider and assess impacts of working within the floodplain.</p> <p>Areas of disagreement include:</p> <ul style="list-style-type: none"> • No assessment of the impact of the development has been made particularly in respect of the fluvial floodplain. • Table 11-23 – Table acknowledges there is a risk of displacing floodwater via the storage of materials / plant in the floodplain. However, the impact and any necessary mitigation required have not been considered. • We have concerns regarding a potential reduction in floodplain storage, which could result from the stockpiling and storage of materials during construction. Additional mitigation and enhancement measures are proposed but no assessment on the impact of such activities in the floodplain has been made. • In line with flood risk policy, flood risk has to be assessed for a lifetime of 75 years. • Both the Immingham and Theddlethorpe facilities as well as some of the pipeline route, temporary compounds, temporary working, access and laydown areas are within the floodplain. The FRA must assess the impacts of land raising/storage on the displacement of floodwater from main river and non-main river sources and whether any flood plain compensatory storage is required. We would recommend that compounds, storage areas and stockpiles be outside of fluvial flood areas. • The FRA must also assess the impacts on the tidal floodplain, particularly with regard to flood flow routes, to demonstrate that the Proposed Development will not increase flood risk to third parties, by deflecting flood water. • Can the applicant explain why 50% confidence bound levels have been used within the information in Table 13, Table 14, Table 16, Table 17 and Table 20. We would expect the 97.5% confidence bound to 	In Discussion

ID	Matter	Detail	Related documents and their references	Comments from the Parties	Position
				<p>have been used. They should also provide additional information on:</p> <ul style="list-style-type: none"> ○ What does this mean for the development? ○ How sensitive is the development to changes in the climate for different future scenarios? ○ Is there adequate built-in resilience from the outset to ensure resilience to flood levels based on a current understanding of flood risk? <ul style="list-style-type: none"> ● Table 15: The level of flood risk is unclear as this paragraph states average breach depths rather than maximum breach depth, which should be used to give an accurate account of the risk. ● Table 18 – level of flood risk is unclear as this paragraph states average overtopping depths rather than maximum depths (2115 0.5% and 0.1% overtopping maximum depths are marginally greater). ● Additional information (mitigation measures) for the CCR is requested. <p>Applicant:</p> <ul style="list-style-type: none"> ● In areas where fluvial floodplains are clearly mapped by the Environment Agency, (EA Flood Map for Planning, Figure 1 in the Environmental Statement - Volume IV - Appendix 11-5: Flood Risk Assessment [APP-101]) (i.e, Sections 2, 3 and 4), there will be no storage of materials within these mapped flood extents. In areas where the EA Flood Map for Planning shows combined tidal and fluvial floodplains (i.e., Section 1 and 5), and fluvial floodplains cannot be identified separately from areas at risk of coastal flooding, a reasonable set back will be provided. There will be no storage of materials within 8m of rivers. Further discussions with the EA (for Main Rivers) and/or the Lead Local Flood Authority (LLFA)/Internal Drainage Boards (for Ordinary Watercourses), will be undertaken as the design evolves through the FEED stage. ● Note that sections of pipes may be temporarily located within the fluvial floodplain at open cut watercourse crossing locations whilst the pipeline is being laid out and welded in place. This is an essential step in the pipeline construction process. These activities will take place during the summer months to avoid times of higher flows. ES Volume II Chapter 11 Water Environment [APP-053] has been updated to include this wording. ● Where materials are stored within the tidal breach flood extent during the construction phase, stockpiles will be managed in line with best practice and 	

ID	Matter	Detail	Related documents and their references	Comments from the Parties	Position
				<p>mitigation set out in the draft CEMP [APP-068] including E23 Water Management Plan, F2 Soil Management Plan, G20 Soil and sub-soil, J31 Cover, re-seed, vegetation of stockpiles, and J34 Revegetation of stockpiles. Agree. The lifetime of the development is assessed for a lifetime of 75 years, in line with NPPF/PPG requirements. Tidal flood risk is assessed to 2115 using the flood breach data provided by the EA.</p> <ul style="list-style-type: none"> Storage of materials will be outside of the identified fluvial floodplains. As noted in G20 in Appendix 3-1: Draft Construction Environmental Management Plan (CEMP) [APP-068] materials will be stored a minimum of 20m from the watercourse. No materials will be stored within a fluvial or surface water flood zone (Flood Zone 2 and 3) unless supported by a risk assessment and additional mitigation. Construction compounds, temporary laydown areas etc, may be located within the tidal floodplain, however the risk of flooding in these areas is residual and therefore compensation storage for any loss of floodplain is not required. During the operational phase only the Theddlethorpe and Immingham facilities are located within the floodplain (the pipeline is located below ground). Should tidal flooding occur the extent of flooding in the area local to these facilities is such that both the development and development in proximity to the Proposed Development would be flooded to a similar depth and displacement of floodwater would be negligible. We welcome further discussion on this subject. We will provide an update to the Flood Risk Assessment [APP-101] at Deadline 2, which will seek to address these points 	
EA30	Assessment findings	The Additional Mitigation and Enhancement Measures set out in the Flood Risk Assessment [APP-101] of the Environmental Statement are appropriate.	Appendix 11-5: Flood Risk Assessment of the Environmental Statement [APP-101]	<p>Environment Agency: <i>[Comment to be inserted by Environment Agency]</i></p> <p>Applicant: Agreed</p>	In Discussion
EA31	Securing Mitigation	All relevant mitigation measures specified in the Flood Risk Assessment [APP-101] of the Environmental Statement is adequately secured through the draft Construction Environmental Management Plan CEMP [APP-068]. The proposed mitigation is appropriate for managing construction and post construction impacts from the Project. Requirement 5 of the DCO [AS-008]	<p>Appendix 11-5: Flood Risk Assessment of the Environmental Statement [APP-101]</p> <p>Construction Environmental Management Plan. [APP-068]</p>	<p>Environment Agency: Agrees in principle, other than:</p> <ul style="list-style-type: none"> The EA does not generally support storage [of materials] in the floodplain. EA support the flood warning and evacuation plan as additional mitigation to protect construction workers. However, further consideration should be given to the possibility of including other embedded mitigation 	In Discussion

ID	Matter	Detail	Related documents and their references	Comments from the Parties	Position
		requires that the final CEMP must be prepared and approved before commencement of development.	Draft DCO [AS-008]	<p>measures such as raising finished flood levels, places of refuge etc.</p> <ul style="list-style-type: none"> • Prior approval of the EA is required for any permanent or temporary works: <ul style="list-style-type: none"> • on or within 8 metres of a main river, flood defence structure or culverted main river (16 metres if tidal); • on or within 16 metres of a sea defence; • any excavation within 16 metres of any main river, flood defence or culvert; or • within the floodplain of a main river if the activity could affect flood flow or storage and potential impacts are not controlled by a planning permission. CEMP • G1: No information on the locations of safe refuge provision within the application. We appreciate that the flood warning and evaluation plan will be developed post consent, under the CEMP, but the application should include an indication of how and where such safe refuge provision will be provided, i.e. will this be within buildings with finished floor levels above the predicted flood level etc. • G20: We do not generally support the storage of materials in floodplain. This measure does not consider the impacts of the displacement of floodwater and whether any floodplain compensation is required. the FRA must assess the impact of construction, operation and decommissioning on the proposed development and third parties. Any compound, storage area or soil storage area must be set back further than 8m from the main rivers. These comments are also applicable for P9 referenced in the FRA and P7 within the Draft CEMP. • P23, P24, G27 and also P3: use the average breach depths for the site, which may result in potential flood depths not being mitigated (the maximum breach depths are greater). The 2115 0.1% breach depths and the critical flood level should be confirmed for both the Immingham Facility and Theddlethorpe Facility to ensure that development remains operational or shuts down during a flood. • Any compound or storage areas must be set back further than 8.0m from the main rivers • FRA should further detail shutdown arrangements in the event of a breach at one site and not the other and vice versa – will the whole pipeline be shutdown? • No detail of the CCR have been provided. We request the applicant confirms if this is the only 	

ID	Matter	Detail	Related documents and their references	Comments from the Parties	Position
				<p>building that is to be manned. Also, what mitigation is proposed to ensure users of the Immingham facility (including the CCR) are safe (finished flood levels, refuge, etc?)</p> <ul style="list-style-type: none"> • Advise the applicant that the temporary crossings of the main rivers must not be flumed. • Shoreline Management Plan should reference “Hold the Line/Managed Realignment” policy in the long term (from 2055-2105) between Theddlethorpe St Helen to Gibraltar Point. Although beyond the project lifetime, it is something to be aware of in the event that the operational life of the pipeline is extended. <p>Applicant:</p> <ul style="list-style-type: none"> • Agree. Storage of materials will be outside of the identified fluvial floodplains. Construction compounds, temporary laydown areas etc, may be located within the tidal floodplain, however the risk of flooding in these areas is residual and compensation storage is not required. Equipment and materials in these areas will be appropriately stored/contained in line with best practice. • Agree. The applicant welcomes the support for the flood warning and evacuation plan as additional mitigation to protect construction workers. Apart from routine maintenance and the manned CCR, the Proposed Development is predominantly an unmanned site, therefore safe refuge will be considered, where required, as development design and the production of the flood warning and evacuation plan progresses. Consideration is given to further mitigation measures, i.e. critical infrastructure, flood resilience and resistance measures in P1 and P2 in Appendix 3-1: Draft Construction Environmental Management Plan (CEMP) [APP-068]. Agree – The EA response has been noted. The Proposed Development will not remain operational during a flood event. • Agree. As noted in G20 in Appendix 3-1: Draft Construction Environmental Management Plan (CEMP) [APP-068] materials will be stored a minimum of 20m from the watercourse. No materials will be stored within a fluvial or surface water flood zone (Flood Zone 2 and 3) unless supported by a risk assessment and additional mitigation. The Applicant has amended the draft Operational Phase Mitigation [APP-073] to include the following commitment: “<i>The Applicant will prepare an Emergency Response Plan which covers potential emergency scenarios, including shut down procedures. This Emergency</i> 	

ID	Matter	Detail	Related documents and their references	Comments from the Parties	Position
				<p><i>Response Plan will be regularly tested through desk top exercises.</i> An outline of the content of what such a plan must include is set out in the Draft Emergency Response Plan [APP-116]. Requirement 15 of the draft DCO includes a requirement for the undertaker to submit an Operational Phase Mitigation plan to the local planning authority for approval no later than three months prior to planned completion of commissioning of the Proposed Development. Thereafter the approved plan must be implemented. This therefore secures the requirement to provide a plan of this nature. An update to the Operational Phase Mitigation [APP-073] will be provided at Deadline 1.</p> <ul style="list-style-type: none"> Only the Immingham Facility will be manned permanently, the Theddlethorpe Facility can be remotely controlled, while the block valves only need to be accessed for maintenance and are not within a mapped floodplain. The base case for the Theddlethorpe facility is that it will not require safe refuge within the facility, as the warning procedures will ensure that staff do not attend site during conditions that could result in a breach of defences (therefore no safe refuge provision has been identified at this stage), however this will be revisited through the FEED stage. The base case for Immingham is that the site will share welfare facilities, including evacuation routes and safe refuge, with the VPI site. As such no safe refuge provisions within the Immingham Site have been identified at this stage, however this will also be revisited. Agree - temporary crossings of main rivers should not be flumed. Crossing schedule provided with DCO indicates that all Main Rivers will either be crossed with Bailey bridges or utilising existing crossings. Agree. The Applicant welcomes the EAs advice in the event that the operational life of the pipeline is extended. 	
Water Framework Directive Assessment					
EA32	Assessment Methodology	The scope of the assessment methodology in Appendix 11-4: Water Framework Directive (WFD) Assessment of the Environmental Statement [APP-100] is appropriate.	Appendix 11-4 Water Framework Directive Assessment of the Environmental Statement [APP-100]	<p>Environment Agency: Areas of disagreement include:</p> <ul style="list-style-type: none"> Table 2 - groundwater bodies are scoped out for the Immingham facility (and other construction elements) with no groundwater body-specific reasoning given. The applicant should provide further reasoning for this. <p>Applicant:</p>	In Discussion

ID	Matter	Detail	Related documents and their references	Comments from the Parties	Position
EA33	Data collection, methods, baseline data and the identification and sensitivity of relevant features and receptors	The approach used for the WFD Assessment reported in Appendix 11-4 of the Environmental Statement [APP-053] follows standard best practice for projects of this nature. The baseline data, survey methods and assessment methodology used are appropriate and follow standard guidelines.	Appendix 11-4 Water Framework Directive Assessment of the Environmental Statement [APP-100]	<p>We are in further discussion with the environment Agency regarding propose updates and an updated WFD assessment will be provided at Deadline 2. .</p> <p>Environment Agency: Agree in principle, other than:</p> <ul style="list-style-type: none"> Table 1 - groundwater bodies are scoped in with the justification that ‘WFD groundwater bodies may be directly impacted by the Proposed Development due to a range of activities that would interact with the local watercourse network during construction, operation, and decommissioning phases’. There may be risks to groundwater which do not bear any relevance to local watercourses. <p>Applicant: We agree with your comments. The WFD assessment is being updated to address any issues with references and terminology. The updated report will be issued at Deadline 2.</p>	In Discussion
EA34	Assessment findings	The findings of the assessment in Appendix 11-4: Water Framework Directive of the Environmental Statement [APP-053] during construction, operation and decommissioning are appropriate..	Appendix 11-4 Water Framework Directive Assessment of the Environmental Statement [APP-100]	<p>Environment Agency: The EA considers the WFD as currently not adequate, and the EA wish to make a holding objection to the application as the assessment is not sufficient.</p> <p>Areas of disagreement include:</p> <ul style="list-style-type: none"> Table 3 - Quantitative Elements. There are potential impacts from groundwater ingress to excavations for non-intrusive crossings on certain water bodies, roads, and the railway. This is not a quantitative issue, but a chemical risk. Unexpected artesian flow and water resource loss would be the quantity issues to address, which have been highlighted to the applicant during pre-application consultation. Table 12 –Quantity tests are included under groundwater Quality issues. This may be a misunderstanding of terminology – the table heading should not be ‘WFD Quality Element’ but instead ‘WFD Status Element’. <p>Applicant: We note the holding objection and your concluding comments that this can be resolved. The WFD assessment is being updated to address any issues with references and terminology. The updated report will be issued at Deadline 2.</p>	In Discussion
EA35	Assessment findings	The Additional Mitigation and Enhancement Measures set out chapter 11 – Water Environment	Appendix 11-4 Water Framework Directive Assessment of the	Environment Agency: [Comment to be inserted by Environment Agency]	In Discussion

ID	Matter	Detail	Related documents and their references	Comments from the Parties	Position
		of the Environmental Statement [APP-053] are appropriate..	Environmental Statement [APP-100]	Applicant: Subject to updated FRA and WFD assessments	
EA36	Securing mitigation	All relevant mitigation measures specified in chapter 11 – Water Environment of the Environmental Statement [APP-053] are adequately secured through the draft Construction Environmental Management Plan CEMP [APP-068]. The proposed mitigation is appropriate for managing construction and post construction impacts from the Project. Requirement 5 of the DCO [AS-008] requires that the CEMP must be prepared and approved before commencement of development.	Appendix 11-4 Water Framework Directive Assessment of the Environmental Statement [APP-100] Construction Environmental Management Plan. [APP-068] Draft DCO [AS-008]	Environment Agency: <i>[Comment to be inserted by Environment Agency]</i> Applicant: Subject to updated FRA and WFD assessments	In Discussion
Drainage Strategy					
EA37	Drainage Strategy	The approach, assessment and conclusions as reported in the Drainage Strategy of the Environmental Assessment [APP-099] are considered appropriate	Drainage Strategy [APP-099]	Environment Agency: Agrees in principle, other than: Sections 3.1.14 and 3.2.7 describe the preference for infiltration drainage of surface water at Washingdales Lane block valve station only. We would highlight that this must not include drainage of areas subject to contamination, and must be designed in line with best practice. Applicant: Noted and Agreed	Agreed
Agriculture and Soils					
EA38	Agriculture and Soils	The approach, assessment and conclusions as reported in Chapter 10 Agriculture and Soils of the Environmental Assessment [APP-052] during construction, operation and decommissioning are appropriate, and assuming the inclusion of proposed mitigation, are considered not significant in EIA terms.	Chapter 10 Agriculture and Soils [APP-052]	Environment Agency: Agreement in principle, the EA welcomes the inclusion of G33 in the Draft CEMP, whereby an Environmental Emergency Response Plan will be prepared. Applicant: Agreed	Agreed
Climate Change					
EA39	Climate Change	The approach, assessment and conclusions as reported in Chapter 15 Climate Change of the Environmental Assessment [APP-057] are considered appropriate are considered not significant in EIA terms.	Chapter 15 Climate Change [APP-057]	Environment Agency: Agreement in principle, except sea level rise only considers the potential for damage to the Theddlethorpe facility. The Applicant is asked to explain why the Immingham facility, which is also within the floodplain, has been excluded. Applicant:	In Discussion

ID	Matter	Detail	Related documents and their references	Comments from the Parties	Position
				This issue was picked up by the ExA as question 1.4.13 in the first round of Written Questions. Please refer to the response provided.	
Materials and Waste					
EA40	Materials and Waste	The approach, assessment and conclusions as reported in Chapter 18 Materials and Waste of the Environmental Assessment [APP-060] are appropriate, and assuming the inclusion of proposed mitigation, are considered not significant in EIA terms.	Chapter 18 Materials and Waste [APP-060]	<p>Environment Agency: The EA has reviewed this Chapter and considers it satisfactory. No further comments.</p> <p>Applicant: Noted, and no further action required.</p>	Agreed
Major Accidents and Disasters					
EA41	Major Accidents and Disasters	The approach, assessment and conclusions as reported in Chapter 19 Major Accidents and Disasters of the Environmental Assessment [APP-061] are appropriate, and assuming the inclusion of proposed mitigation, are considered not significant in EIA terms.	Chapter 19 Major Accidents and Disasters [APP-061]	<p>Environment Agency: The EA has reviewed this Chapter and considers it satisfactory. No further comments.</p> <p>Applicant: Noted, and no further action required.</p>	Agreed
Cumulative Effects					
EA42	Cumulative Effects Assessment	The approach, assessment and conclusions as reported in Chapter 20 Cumulative Effects Assessment of the Environmental Assessment [APP-062] are appropriate.	Chapter 20 Cumulative Effects Assessment [APP-062]	<p>Environment Agency: The EA has reviewed this Chapter and considers it satisfactory. No further comments.</p> <p>Applicant: Noted, and no further action required.</p>	Agreed

4 References

Ref 4-1 (*Author, Date*). Title. Accessed: Date. Available at: