Christopher Butler
The Planning Inspectorate
Temple Quay House
Temple Quay
Bristol
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Our ref: SO/2023/123043/01-L01
Your ref: EN070007 – Deadline 1

Date: 17 April 2023

Dear Mr Butler

APPLICATION BY LIVERPOOL BAY CCS LIMITED FOR AN ORDER GRANTING DEVELOPMENT CONSENT FOR THE HYNET CARBON DIOXIDE PIPELINE SCHEME

ENVIRONMENT AGENCY DEADLINE 1 (17TH APRIL 2023) SUBMISSION:

- **ENVIRONMENT AGENCY RESPONSES TO THE EXAMINING AUTHORITY'S FIRST WRITTEN QUESTIONS (ExQ1) AND REQUESTS FOR INFORMATION**

- **ENVIRONMENT AGENCY'S WRITTEN REPRESENTATION**

NATIONALLY SIGNIFICANT INFRASTRUCTRE PROJECT – HYNET CARBON DIOXIDE PIPELINE

Thank you for notifying the Environment Agency (EA) of the request for representation as part of 'Deadline 1' for the Hynet Carbon Dioxide Pipeline Development Consent Order (DCO) Examination.

The contents of this letter includes our responses to the Examining Authority's First Written Questions (ExQ1), received on 27th March 2023, where queries have either been directed to the EA or we have provided comments where we have identified ourselves as an 'Interested Party' (pages 2-23). For ease, we have used the table format presented in the ExQ1 document and incorporated our responses under 'Section 1' of this letter.

In addition, the EA's Written Representation, including summary, is provided under 'Section 2' of this letter for the Examining Authority's consideration which includes additional commentary wider to our responses to EA related questions on the ExQ1 (pages 24-34).

Section 1: Environment Agency Responses to ExQ1 (EA Related Questions)

Hynet Carbon Dioxide Pipeline – Examining Authority's First Written Questions (EA Related Questions)			
Issue Topic 1.	**General and Cross-Topic Questions**		
Ref.	**Question to**	**Examining Authority Question**	**EA Response to Question**
Q1.1.3	All Relevant Planning Authorities, including FCC and CWCC and **IPs**	• As additional context to inform the Examination the following information is requested: i) Advise if there is a Community Infrastructure Levy Charging Schedule (CILCS) in place for the administrative area the Development Consent Order (DCO) scheme falls within, or within any neighbouring administrative boundaries. ii) Confirm if there any planned improvements to the local area which are separate to the scheme under consideration but potentially complimentary to it, directly arising from the CILCS? iii) Notwithstanding any CILCS mechanism in place, advise if there are any other planned or known separate publicly led local capital investments, projects, or other planned initiatives in the vicinity of the area proposed for improvement or nearby which could potentially compliment the scheme. For the avoidance of any doubt the planned improvements queried/ referred to may cover any aspect of the local environment and could be wide ranging in their purpose. iv) Explain how any existing separate local capital investments, projects or other initiatives would complement the scheme, if there are any being advanced.	The EA are aware of environmental projects (i.e. Chester Zoo Nature Recovery Corridor; the River Gowy Water Vole Recovery Project; and the Cheshire Wetlands Project) within the vicinity of the pipeline route and would advise further details are sought from the Cheshire Wildlife Trust and Cheshire West and Chester Council (CWCC) on this matter. With regards to EA led projects, we have a capital programme which includes a list of potential Flood Risk Management schemes in the local area. It is a live programme that is altered continuously and subject to change. It would be advisable for the applicant to approach us to understand any specific schemes in more detail that may be able to complement the Hynet Carbon Dioxide pipeline project. The list of schemes has been included under *Annex 1* of this letter. We advise engagement with CWCC where they have been identified as the lead Risk Management Authority on the delivery of a scheme. We advise the applicant ensures the scheme does not adversely affect operations and activities associated with the future delivery of such schemes.
Q1.1.9	**IPs**, including CWCC and	The ExA draws the Applicant's/ IPs' attention to the content of Planning Inspectorate Advice Note 9: Rochdale	Overall, we are satisfied with the scope of the assessment that has been undertaken for the ES with regards to the interrelationship

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	FCC	Envelope. This advice note affirms the established principle that: "*The ES should not be a series of separate unrelated topic reports. The interrelationship between aspects of the proposed development should be assessed and careful consideration should be given by the developer to explain how interrelationships have been assessed in order to address the environmental impacts of the proposal as a whole. It need not necessarily follow that the maximum adverse impact in terms of any one topic impact would automatically result in the maximum potential impact when a number of topic impacts are considered collectively. In addition, individual impacts may not be significant but could become significant when their interrelationship is assessed. It will be for the developer to demonstrate that the likely significant impacts of the project have been properly assessed.*" Do IPs including Relevant Planning Authorities agree that the likely significant impacts of the DCO Proposed Development have been adequately assessed by the ES? If not, please state why not. *You may wish to combine the answer to this question with the answer to question Q1.1.6*	between aspects of the proposed development at this time. We are satisfied that the Environmental Chapters do have sufficient overlap and interaction as to not be stand-alone. Whilst each Chapter does have an individual reference, there is enough interaction to make the document holistic. However, further work on the ES and associated supporting reports is required in line with our response to the ExQ1 and our Written Representation under 'Section 2' of this letter. We advise that this may impact the proposed mitigation measures to manage the impacts of the scheme on the environment as established under the Register of Environmental Actions and Commitments (REAC) [APP-222]. Once resolved, we will be in a position to determine whether the likely significant impacts of the proposed development has been adequately assessed.
Issue Topic 4.	**Biodiversity, Ecology and Natural Environment**		
Ref.	**Question to**	**Examining Authority Question**	**EA Response to Question**
Q1.4.1	IPs, including Relevant Planning Authorities, Natural Resources Wales (NRW),	• **IPs** i) Confirm whether you are satisfied with the range of ecology surveys associated with ES - Chapter 9 - Biodiversity [APP-061]; ii) Do you consider the baseline information presented to be a reasonable reflection of the current	We can confirm that the range of aquatic based ecology surveys undertaken (i.e. Appendix 9.9 Aquatic Ecology (Watercourses) Survey Report [APP-113]) are acceptable and the baseline is a reasonable reflection of existing conditions.

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	Environment Agency (EA), Natural England (NE)	situation? iii) In respect of i) and ii) if not, why not and what would resolve any residual concerns? The ExA acknowledges that this may be covered by a SoCG. If the answer to these questions is be covered by a SoCG please indicate that accordingly.	
Q1.4.2	Applicant and IPs, including Relevant Planning Authorities, NRW, **EA,** NE	Confirm whether you are satisfied with the monitoring measures during construction and post construction described within Section 9.13 of ES - Chapter 9 - Biodiversity [APP-061]. In particular, your comments are invited on the monitoring requirements anticipated during construction detailed within Table 9.13 and within Appendices 9.1 - 9.10 (Volume III), in relation to protected species licencing and the Outline Landscape Ecology Management Plan [APP-229]. As well as the post-construction monitoring proposed to be undertaken in accordance with a Landscape Ecology Management Plan (LEMP) [APP-230] developed at Detailed Design. The LEMP is proposed to be included within the Operations and Maintenance Environment Management Plan (OMEMP), provided post-construction. The ExA acknowledges that this may be covered by a SoCG. If the answer to these questions are being covered by a SoCG please indicate that accordingly.	We request the applicant specifies where hydromorphology has been considered as a receptor and therefore, associated mitigation to ensure impacts are minimised. We note the following the following actions / measures as in Table 9.12 of Chapter 9 Biodiversity [APP-061] (and REAC [APP-222]) have not been included within Table 9.13 which are considered relevant. These include the following with additional commentary where improvement / clarification is required: • D-BD-046: the EA welcome the proposal to avoid undertaking works in high flows. However, regardless of timing, sediment controls will be required and should be detailed. • D-BD-047: requires turbidity monitoring for all open-cut crossings. • D-BD-048 and D-BD-049: ensure appropriate reinstatement of watercourse features. The EA welcome these measures, however, where not practicable, mitigation must be sought elsewhere within the scheme boundary. We advise the applicant also includes a requirement for ongoing monitoring and maintenance of in-channel and riparian habitat created from the proposed scheme.
Q1.4.3	Applicant and **IPs**, including FCC, CWCC, NRW and NE	Paragraph's 9.2.33-36 of ES Chapter 9 states that Biodiversity Net Gain (BNG) will be a statutory requirement for most planning applications, as per the new Environment Act (previously Environment Bill), which achieved Royal Assent through Parliament on 9 November 2021. Whilst	We agree and support the ExA's observations on BNG where further biodiversity enhancement could potentially be secured through the scheme. Whilst we would advise comments from Natural England (NE) on BNG are considered in the first instance, the EA hold an interest in the delivery of BNG on the aquatic /

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		there is currently a transition period before mandatory requirements come into force (expected to be winter 2023), it will require development to deliver a 10% net gain in biodiversity units (area habitat, hedge and river units where applicable), as determined through the use of a biodiversity metric. Moreover, it is anticipated by the Applicant that the BNG requirement will apply across all terrestrial infrastructure projects, or terrestrial components of projects, accepted for examination by the Planning Inspectorate through the NSIP regime by November 2025 (subject to the provisions of the applicable National Policy Statements or Biodiversity Gain Statement). Projects accepted for examination before the specified commencement date would not be required to deliver mandatory BNG under the terms of the Environment Act. • **Applicant** i) Nevertheless, biodiversity interests and the wider policy/ statutory context those interests sit within, both in England and Wales, remain important and relevant considerations whereby significant enhancement could still potentially be secured irrespective of the BNG statutory provision anticipated. Does the Applicant agree? If not say why. ii) Can the Applicant clarify and set out/ signpost how it intends to secure BNG significantly above the 1% currently detailed in the examination documentation? Confirm the level of BNG the Applicant is committed to providing as the overall aim. Outside of BNG measurement, can the Applicant set out how it could further boost and achieve meaningful overall	riparian environment impacted by the proposed development. We have highlighted to the applicant that this could be achieved through the completion of Water Framework Directive (WFD) mitigation measures (i.e. river restoration and habitat creation) assigned to the River Gowy and Stanney Mill Brook, both within and in close proximity to the proposed development. The measures, as briefly described above, are required for both waterbodies to achieve the statutory objective of 'Good Ecological Potential'. Whilst these are recognised briefly within Appendix 18.3 WFD Assessment [APP-165] (Table 5.14 and 5.15), the details of such measures has not been specifically reported within the document. We previously provided the applicant with the specific Heavily Modified Water Body (HMWB) WFD mitigation measures for the Gowy (Milton Brook to Mersey) (GB1120608060250) and Stanney Mill Brook (GB112068060260) on 2nd March 2022. We note that the specific details of these measures have not been fully considered / included within the WFD Assessment (Appendix 18.3 of the ES [APP-165]). For information, a list of the WFD mitigation measures can be found in *Annex 2* of this letter. We would advise Regulation 33 of the Water Framework Directive Regulations 2017 (WFD) places a duty on the Secretary of State and public bodies to have regard to River Basin Management Plans (RBMPs) when exercising their functions. This means they must ensure they do not authorise a project which may jeopardise: • The current status of a WFD element or cause its deterioration • The attainment of good status • Pollution reduction measures • Standards and objectives for protected areas

		biodiversity enhancements? iii) Does the Applicant agree that s106 agreement use involving a commuted sum mechanism to facilitate biodiversity enhancements may be a feasible/ suitable option available? iv) To what extent has peatland, wetland or salt marsh creation/ restoration (or similar) been considered as an enhancement that links to shared interests of climate change risk resilience from flooding and enabling nature based forms of carbon capture. If not, why has it not been considered? • **IPs** v) Submit your views on seeking biodiversity enhancement/ facilitating BNG, inclusive of any future proofing.	We also recognise that Planning Inspectorate Advice Note Eighteen advocates that the applicant should describe any positive contributions the project could provide with respect to the objectives of relevant RBMPs. We would welcome further discussions with the applicant on this matter to determine actions / measures that could be undertaken to contribute to the overarching objectives of the WFD and associated North West RBMP where such provisions could provide additional BNG as part of the scheme. Further to the above, as an organisation, the EA are currently aspiring to deliver BNG as part of the Flood Risk Management schemes under our capital programme (*Annex 1*). This will either be achieved as part of the delivery of the scheme or offsetting where this is found to be unfeasible. There is a potential opportunity of additional habitat credits to support the delivery of BNG to be sought through these schemes and would advise the applicant to undertake discussions with us to establish whether this could be achieved / delivered through this route if required.
Q1.4.4	Applicant and **IPs**, including FCC, CWCC, NRW and NE	The ExA notes the submission of BNG Assessment – Part's 1-6 [APP-231] to [APP-236], consecutively. i) The level of BNG overall enhancement outlined as being able to be secured is very low. Can the Applicant further justify the rationale for an overall 1% BNG increase aims rather than seeking the higher thresholds of 5% or 10% (stated in the application submissions) in the first instance which are deemed possible? ii) Paragraph 1.4.2 of [APP-231] highlights that BNG up to 10% across area and river habitats is a feasible opportunity. Outline the progress made with landowners in securing such river habitat or other aquatic habitat improvements, as well as the next	In addition to the comments provided under Q1.4.3, we note the majority of proposed pipeline route is through agricultural land and the impacted watercourses have been historically modified for agriculture and land drainage purposes. Therefore, we suggest there is significant scope (space and opportunity) to make in-channel and riparian improvements within the existing site boundary. We note the current proposal is to provide overall 1% BNG increase for Priority Habitats only, where we consider this as a missed opportunity to enhance riparian environments. The existing site walkovers undertaken in October and November 2021 (to inform the WFD Assessment [APP-165]) could be used to determine opportunities and support such proposals for wider environmental enhancement with respect to both BNG and the

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			steps to be taken along with a likely timeframe to inform the Examination.	WFD.
		iii)	The ExA acknowledges that the BNG Assessment undertaken is focused on priority habitats. This is believed to be based on the spatial dataset in the Priority Habitats Inventory (England) compiled by NE last updated 13 December 2022 which does not cover Wales. Is that the case? Confirm the data sets which have been utilised for both England and Wales and their age.	It is currently unclear from the BNG Assessment ([APP-231] to [APP-236]) what enhancements have been included. We advise future BNG and WFD Assessments should include further details on: • High level riparian enhancements proposed within the current WFD Assessment [APP-165] to mitigate the loss of mature riparian trees at: East Central Drain; Finchetts Gutter Tributary; Backford Brook; Friars Park Ditch; and Alltami Brook. • Whether the scheme could deliver specific HWMB WFD mitigation measures (see further comments under Q1.4.3). The renaturalisation of the River Gowy is recognised within the WFD Assessment [APP-165] when considering the impacts of the scheme on hydromorphology for this river (i.e. Table 5.2). We suggest that there is a potential for the scheme to contribute to the delivery of WFD mitigation measures MMA We1076 (Improve floodplain connectivity) and MMA Wo1495 (Gowy meadows: Improve floodplain connectivity) where this has not been currently explored. We recommend future reporting considers whether any of the HWMB WFD mitigation measures, as listed in *Annex 2*, could be delivered as part of the scheme and / or investigate whether there are opportunities to contribute to these measures. • Wider opportunities for environmental enhancement within the study area.
		iv)	Further to the above question there is the national list of priority habitats and species in England ('Section 41 habitats and species') for public bodies, landowners and funders to use for biodiversity conservation. The UK BAP priority species and habitats were created between 1995 and 1999, and were subsequently updated in 2007, following a 2-year review of UK BAP processes and priorities, which included a review of the UK priority species and habitats lists. The 'UK Post-2010 Biodiversity Framework', published in July 2012, succeeded the UK BAP. Albeit the UK BAP remains a useful reference point for both 'species' and 'habitats'. For the avoidance of any doubt can you confirm the priority habitat list the Applicant is referring to in its assessment for habitat protections and for BNG/ biodiversity interest purposes?	
		v)	Explain what scope remains for the scheme to further complement existing ecological and biodiversity initiatives within the local areas the scheme passes through. If relevant local/ regional or national initiatives have not been fully considered to date, provide an update on how potential integration could be achieved.	We would advise since the production of the BNG Assessment ([APP-231] to [APP-236]) that the Biodiversity Metric has since been updated to 4.0. Therefore, we would advocate that the latest Biodiversity Metric is utilised to inform the proposals. However, we recommend advice from NE is sought on this matter in the first
		vi)	The EA [RR-024] comment that a waterbody 'near	

		Stanlow Refinery' will be permanently lost. Can the Applicant confirm to the Examination the details of adequate compensatory habitat as a result of this loss? vii) The EA [RR-024] also note that in addition to the creation of wood habitat piles and the installation of bat and bird boxes, the completion of nearby Water Framework Directive (WFD) mitigation measures, which enhance riverine habitats for biodiversity, must also be included. This would contribute to BNG and the legal objective of 'good ecological potential' for these waterbodies. Does the Applicant acknowledge these responses? If so, explain/ signpost what provision is to be made.	instance. With regards to point 'vi)', we can confirm that the pond that will be permanently lost near Stanlow Refinery has been assessed as having limited ecological value. Therefore, we have no in principle concerns with the permanent loss of this water feature. We would welcome any proposals on the incorporation of enhancements to the aquatic environment as part of the proposed scheme to compensate for this loss.
Q1.4.7	Applicant and **IPs**, including FCC, CWCC, NRW and NE	• **Applicant** The ExA requests the Applicant to acknowledge that river (or other water), hedgerow and area habitats are considered independently, and are not interchangeable. It must be clearly understood that a loss of one type cannot be addressed by providing another of a different type. • **Applicant / IPs** Signpost the particular local nature strategies (including those entailing nature recovery or related ecologically based methods for carbon sequestration) covered in the geographical area subject to the DCO, or those nearby, that could be used for the delivery of additional ecological enhancement. Suggest the strategies which could be used to secure enhancement and the precise mechanisms to implement the desired improvement.	In addition to our comments under Q1.1.3, we wish to highlight that the Cheshire Local Nature Recovery Strategy (LNRS) is due to commence initial stakeholder engagement and meetings during Spring / Summer 2023. CWCC, along with Cheshire East Council, will lead and co-ordinate the strategy with assistance from NE. LNRS are a new mandatory system of spatial strategies for nature established by the Environment Act 2021. They are designed as tools to encourage more coordinated practical and focused action and investment in nature. They will also be critical evidence for Local Plans and targeting for BNG delivery. We recommend advice is sought from the above organisations for the England section of the scheme with regards to the forthcoming LNRS.
Q1.4.16	IPs, including	• The ExA acknowledges the content of Appendix 9.9	We are satisfied with the scope and content of the aquatic surveys

	Relevant Planning Authorities, NRW, **EA** and NE	Aquatic Ecology (Watercourses) Survey Report and Appendix 9.10 Aquatic Ecology (Ponds) Survey Report [APP-113] [APP-114]. Are IPs/ Statutory Consultees satisfied with the scope and content of the aquatic surveys provided? If not state why not.	from an EA perspective. With regards to Appendix 9.9 Aquatic Ecology (Watercourses) [APP-113], the preferred survey methods used match the standard WFD survey methods. Where they deviate, for example for health and safety reasons, the alternative methods, such as eDNA, are perfectly acceptable. It is noted that DNA can produce false positives associated with upstream sources like canals and still waters but overall, the Fisheries baseline assessments are generally representative of the assessed waterbodies.
Issue Topic 5.	**Climate Change**		
Ref.	**Question to**	**Examining Authority Question**	**EA Response to Question**
Q1.5.3	Applicant and **IPs**, including CWCC, FCC, NRW and NE	Having regard to ES Chapter 7 – Climate Resilience [APP-059] the ExA notes the content of Table 7.13 titled Embedded mitigation in the DCO Proposed Development's Preliminary Design dealing with climate risk during any future operation. What further embedded design mitigation is available to ensure ecological and landscape provision linked to the scheme remains sufficiently resilient to deal with the climatic changes anticipated in future years? Further explain/ substantiate how embedded design mitigation or other additional mitigation/ enhancement possible to achieve would be successful against the climate risks evidenced. For example, any new wetland creation possible may result in several cross-cutting benefits such as those associated to additional ecologically based carbon storage, ecological enhancement and dealing with local flood risk. Similarly, support for offsite seagrass meadow planting, kelp growth initiatives or saltmarsh restoration could have wider cross cutting beneficial impacts. **IPs** are invited to make whatever comments they deem to be appropriate. In particular comments are sought by the	We have highlighted that a range of nature-based enhancements could be achieved through the delivery and / or contribution to relevant WFD mitigation measures (see our responses under Q1.4.3 and Q1.4.4) where this could also improve local resilience to climate change impacts. Table 7.13 of the ES Chapter 7 – Climate Resilience [APP-059] currently includes no mention of specific biodiversity related mitigation (i.e. habitat reinstatement as part of the scheme) or additional enhancement measures. Mitigation and enhancement areas should be included as a potential receptor to climate change and associated embedded mitigation outlined within this table.

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		ExA on whether a range of nature based mitigation/enhancements available and achievable has been properly considered?	
Q1.5.4	Applicant and IPs, including CWCC and FCC	Chapter 7 – Climate Resilience [APP-059] section 7.14 details that the DCO Proposed Development will have an OMEMP (as included as a Requirement of the Draft DCO to be followed for routine maintenance and inspection visits of the CO2 Pipeline and the AGIs and BVSs to ensure their protection against potential climate impacts identified in the REAC. Plus, monitoring and management of the surface water drainage features post planning will be undertaken to obtain long term ground water data, in accordance with the Outline Surface Water Drainage Strategy Report. How will landscaping and ecological provision (including enhancement) be monitored in a way that secures adequate climate resilience including at post decommissioning stage?	As highlighted in our response to Q1.4.2, monitoring and maintenance of all areas of habitat reinstatement and enhancement proposed should be a requirement of the scheme.
Issue Topic 6.	**Compulsory Acquisition, Temporary Possession and Other Land or Rights Considerations**		
Ref.	**Question to**	**Examining Authority Question**	**EA Response to Question**
Q1.6.3	**Affected Persons/ IPs**	Are any Affected Persons or IPs aware of any inaccuracies in the BoR [APP-030], Statement of Reasons [APP-027] or Land Plans [APP-008]?	It has been identified that the EA own a section of the Gowy watercourse (not including the banks) within the area of works / development for the proposed scheme. When cross referencing the Land Plans [APP-008] and BoR [APP-030] it is recognised that plots '6-02', '6-03', '6-10', '6-11' and '6.12' are within EA ownership. We can confirm that this is correct. We request clarification as to why the EA have been identified as an 'occupier or reputed occupier' in the BoR [APP-030] for plots 1-04; 1-06; 1-07; 1-21; 1-25; 2-01; 3-14; 3-15; 3-17; 4-07; 4-10; 4-13; 5-14; 5-16; 5-24; 5-25; 5-26; 6-07; 6-14; 6-17; 6-19; 6-23; 9-16; 9-17; and 12-10.
Q1.6.8	**Affected Persons and IPs**	• Are any 'Affected Persons' and/ or 'IPs' aware of: i) any reasonable alternatives to any CA or Temporary Possession (TP) sought by the Applicant; or	With regards to the land identified within EA ownership, we have no in principle issues with the CA / TP sought by the applicant at this time. However, we request clarification, as highlighted in our

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		ii) any areas of land or rights that the Applicant is seeking the powers to acquire that they consider are not needed?	response to Q1.6.3, with regards to plots where the EA have been identified as an 'Occupier or Reputed Occupier'.
Q1.6.23	**Applicant, Affected Persons and IPs**	• Do you consider all potential impediments to the development have been properly identified and addressed? Additionally, are there concerns that any matters, either within or outside the scope of the draft DCO, that would prevent the development becoming operational may not be satisfactorily resolved? This includes matters related to acquisitions, consents, resources or other agreements?	With regards to the land identified within EA ownership, we have no in principle issues with the CA / TP sought by the applicant at this time. However, we request clarification, as highlighted in our response to Q1.6.3, with regards to plots where the EA have been identified as an 'Occupier or Reputed Occupier'.
Issue Topic 9.	**Environmental Impact Assessment / Environmental Statement**		
Ref.	**Question to**	**Examining Authority Question**	**EA Response to Question**
Q1.9.1	Applicant and **IPs**	The ExA recognises that some of the baseline survey information included within the ES is of some age. There are also circumstances which have arisen (including from the COVID-19 pandemic) which may or may not had an effect to using the baseline data and any conclusions/ assumptions to be drawn from that. i) The Applicant is requested to set out in a single schedule (with reference to the relevant chapters) any additional baseline data gathering that has taken place or is ongoing, or otherwise set out the reasons why that existing baseline data remains fit for purpose. ii) Can the Applicant also set out their response to any potential impact on any baseline position and their views as to the overall reliability of submitted information taking into account that particular change of circumstance, and any other material change of circumstances anticipated.	Overall, we are satisfied with the baseline surveys that have been undertaken to inform the cumulative impact in the ES with the exception of ground conditions within ES Chapter 11 Land and Soils [APP-063] (including supporting baseline reporting ES Appendix 11.1 Phase 1 Land and Soils (Contaminated Land) Baseline Report [APP-117 to APP-120] and ES Appendix 11.6 Ground Investigation Report [APP-135 to APP-137]) and where this relates to elements in ES Chapter 18 Water Resources and Flood Risk [APP-070]. From a ground conditions perspective, the information that has been presented to date to support the submission of the ES presents an outline view of existing conditions along the pipeline corridor. It is currently insufficient in detail / assessment to inform decisions on depths below ground for the pipeline and possible additional work that may be required to ensure the proposed development mitigates potential impacts on 'controlled waters' (i.e. remedial requirements).

		iii) With respect to cumulative effects related information. Confirm any updates to that. **IPs** are you satisfied with the baseline surveys which inform cumulative impact in the ES? If not say why not.	We understand that where the pipeline passes through areas which have been identified as having largely rural or non-industrial historical land use there is less importance to add greater investigation and assessment, however, where there is historic or ongoing industrial land uses, then further information on land conditions is imperative as the assessment of this possible adverse impact needs to be realised at this time and where necessary, identify where further work may need to be undertaken. We note ES Appendix 11.6 Ground Investigation Report [APP-135 to APP-137] indicates where further targeted investigation and monitoring is required to further inform existing ground conditions. We request clarity on when this additional work is intended to be undertaken. As highlighted in paragraph 15.2.1, it has been identified that Per and polyfluorinated alkyl substances (PFAS) may have potentially contaminated the groundwater. PFAS are emerging contaminants of concern which may, in certain circumstance, require specialist treatment / additional permitting requirements. Therefore, we strongly advise where PFAS contaminants are included in future laboratory suites to inform existing ground conditions that these are undertaken to inform the Examination process and / or provision is made to establish how this will be managed in the event it is found to be present. Such considerations will also be integral to informing ES Chapter 14 – Material Assets and Waste [APP-066], with regards to assessing the impacts of the management of waste during construction and the Outline Construction Environmental Management Plan (OCEMP) [APP-225] at this time.

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Issue Topic 10.	Flood Risk, Hydrology, Water Resources and Contamination		
Ref.	**Question to**	**Examining Authority Question**	**EA Response to Question**
Q1.10.4	The Applicant and **IPs**, including: NRW; FCC as LLFA and SDSAB; WW; CWCC; and United Utilities.	• **Applicant** i) There is limited information on the groundwater levels at each of the proposed BVS and AGI sites. What groundwater survey information/ monitoring is proposed to understand any potential risk of groundwater flooding to inform the detailed drainage design? ii) The statutory consultation phase highlighted Chester Road, Pentre and Leaches Lane Mancot where both internal and external sewer flood risks due to hydraulic incapacity. In addition, the postcode area CH5 3HJ (Blackbrook Avenue, Hawarden) is an identified risk of external flooding. How have those specific risks been factored/ mitigated by the scheme? iii) Can the Applicant confirm if a Dewatering Management Plan and a Groundwater Management and Monitoring Plan is able to be submitted to inform the Examination? • **Applicant and IPs** iv) Significant dewatering is expected adjacent to the River Gowy and the West Central Drain. These are in the Gowy and Ince Marshes WFD surface water bodies. Do IPs have any comments to make on that aspect or any other aspect of the proposal? Can any related ecological benefits be secured in tandem with dealing with flood risk management issues arising?	The impacts of the proposed dewatering activities on the Gowy and Ince Marshes area will need to be determined as part of a Hydrogeological Impact Assessment (HIA) required to support the abstraction licence application(s) or as part of the overall Dewatering Management Plan. It is noted that a Dewatering Management Plan is intended to be included as an Annex to the Construction Environmental Management Plan (CEMP). In relation to securing ecological benefits which could be potentially provided in tandem with dealing with flood risk management issues, we would refer to our comments under Q1.4.3 and Q1.4.4 for the applicant to explore whether such multi-benefits could be achieved.

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Q1.10.7	Applicant and IPs, including NRW, NE and **EA**	• **Applicant** i) Is the principle of achieving significant ecological enhancement or greater BNG using the broader offshore marine environment a feasible option to the Applicant? (i.e., Delivered through the Marine Protected Areas established UK wide which in combination are intended to form an 'ecologically coherent and well-managed network'). ii) Has this approach been explored with JNCC and other statutory consultees? (i.e., for England – NE; and for Wales – NRW but both of those consultees for Marine Protected Areas in territorial waters?) iii) It is noted that NRW have three river basin districts in Wales and each has its own river basin management plan: - Western Wales District – entirely in Wales; - Dee District – cross-border with England; and - Severn District - cross-border with England (led by the EA). Does the Applicant acknowledge and agree there may be scope available to support river basin management plans through potential enhancement? Has further dialogue been undertaken with NRW or the EA to support river basin management interests? iv) The Appendix 18.3 WFD Assessment states that Riparian vegetation clearance would be limited as far as practicable to the immediate areas of construction to permit the execution of works. Vegetation would be reinstated post-construction as far as practicable. Confirm the DCO mechanism which would ensure that. • **Applicant and IPs** v) Vegetation clearance is expected to occur within the	We advise under the Environmental Permitting (England and Wales) Regulations 2016, a Flood Risk Activity Permit (FRAP) or registered exemption may be required. Certain activities are also potentially excluded from the requirement to obtain a FRAP or registered exemption. Dewatering activities may require an abstraction licence and Environmental Permit for the discharge activity, or registered exemption where applicable. Please see further comments of additional technical considerations for dewatering activities under our response to Q1.10.4. For the England section of the scheme, such licences and consents are required to be obtained from the EA. We request this is reflected in the Other Consents and Licences document [APP-046]. Further to the above, a licence will likely be required from NE for vegetation clearance affecting legally-protected species, such as, water voles, great crested newts, bats and badgers.

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		Mersey, Ince Marshes, Gowy, Stanney Mill Brook, Finchetts Gutter, Garden City Drain, Sandycroft Drain, Wepre Brook, Dee (North Wales), and North Wales WFD surface water bodies. In addition, significant dewatering is expected adjacent to the River Gowy and the West Central Drain. These are in the Gowy and Ince Marshes WFD surface water bodies. Please confirm the licensing provision required for the particular works listed above.	
Q1.10.9	Applicant and IPs, including WW, United Utilities and **EA**	• **Applicant** With respect to groundwater resources and quality explain what mechanisms are/ would be in place to ensure that no private water supply can be derogated because of the works or operation of the scheme, even temporarily, without the prior written consent of the owner and the provision of mitigation measures? Regarding potential impacts during construction and any proposed HDD activity. Clarify what investigations, assessments, mechanisms, and consultation requirements are to be secured to ensure HDD works will not pose a risk to groundwater resources • **IPs** Your comments in regard to the above are invited.	Following on from our response under Q1.10.4, we advise the applicant will need to consider the potential impact of dewatering operations on water features by undertaking a HIA as required to support any abstraction licence applications. The HIA will need to include an assessment of any necessary mitigation measures that will be required should an impact be identified. With respect to private water supply abstractions, the impact on these sources will need to be assessed as part of any abstraction licence application, or where a licence is not required due to an applicable exemption the impacts will need to be assessed as part of the Dewatering Management Plan and Groundwater Monitoring and Management Plan. If there is a potential for derogation, then this could impact granting an abstraction licence unless a derogation agreement from the licence holder is provided (Section 39 of the Water Resources Act 1991). This enables an applicant to try to secure the consent of a protected right holder to enable a licence to be granted. It will be up to the applicant to ensure this has been agreed and would advise this is sought at the earliest opportunity. Whilst private water supplies do not have the same protected rights on the quantity of water that licenced abstractions do, they are still considered a lawful use of water and we would expect those supplies to be protected. This protection could, for example, be

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			provided by designing the dewatering programme in such a manner to limit the impacts, or if this is not feasible, the applicant could make an agreement with the owner of the private supply to allow a derogation in a similar manner to that described above, or agree to provide an alternative water supply during the period over which the dewatering takes place should an impact occur. Each situation would be site-specific and would require a detailed HIA to be carried out. Integral to this process and to off-set derogation of water supply operations, it is important to fully characterise / understand the contamination risks to controlled waters (groundwaters) from the project activities where we understand additional ground investigation and assessment will be undertaken (see our response to Q1.9.1). Through this knowledge, the possible risks associated with the project activities from land contamination, and material reuse if soil transfers take place along the length of the pipeline (i.e., transferring soils form one section of the pipeline protect to another), can therefore, be fully understood. This information should be used to inform the Dewatering Management Plan. It is not clear from the OCEMP [APP-225], particularly OCEMP Appendix 1 – Outline Soil Management Plan [APP-226], whether this process is fully known or understood. We appreciate that this might be as a result of insufficient detailed information at this stage, however, we advocate that this is understood at the earliest opportunity to ensure requirements from both a DCO and wider consenting perspectives are realised.
Q1.10.10	**IPs**, including NRW, WW, United Utilities, CWCC and FCC Applicant	• The submitted WFD Assessment [APP-165] and Outline Construction Environmental Management Plan [APP-225] indicate that all new permanent structures would be set-back from watercourses, including outfalls, to avoid modifications to watercourses themselves. • **Interested Parties**	We advise under the Environmental Permitting (England and Wales) Regulations 2016, a Flood Risk Activity Permit (FRAP) or registered exemption may be required, particularly with regards to the proposed outfalls. Certain activities are also potentially excluded from the requirement to obtain a FRAP or registered exemption.

		• Accounting for any locally known watercourses, outfalls, or hydrogeological anomalies which may be apparent; do IPs agree the Applicant's approach detailed in [APP-165] and [APP-225] would be possible? Paragraph 7.1.7 of the WFD Assessment [APP-165] states that the DCO Proposed Development has been assessed and concluded to have no impact on the Wirral and West Cheshire Permo-Triassic Sandstone Aquifers, the Dee Permo-Triassic Sandstone, the Dee Carboniferous Coal Measures and the Clwyd Carboniferous Limestone Groundwater WFD water bodies. Do IPs agree with that conclusion? If not, please state your reasons. The Applicant states the objectives of the DCO Proposed Development is to reinstate habitats where practicable. Where watercourses and riparian vegetation would be impacted, they would be reinstated post-construction and most watercourses would recover within two years. The exception would be where mature tree cover in the riparian zone is removed. Therefore, riparian enhancements are proposed to mitigate those impacts. Riparian enhancements are proposed at: East Central Drain; Finchetts Gutter Tributary; Backford Brook; Friars Park Ditch; and Alltami Brook. Should any further areas be considered? if so, state why. **Applicant** • Paragraph 7.14 of the WFD Assessment [APP-165] states that the riparian enhancements may result in improvement in the River Condition Score for those watercourses once the tree cover is established. In addition, gravel augmentation is proposed on the Alltami Brook to off-set the potential reduction in spawning	Where outfalls are set back from the watercourse, additional maintenance requirements may be necessary to prevent blockages and should be considered as part of a long-term management strategy for the operation of the proposed development. With regards to Paragraph 7.1.7 of the WFD Assessment [APP-165], for the England section only, we agree with the conclusion that the development is unlikely to have a significant impact on the Wirral and West Cheshire Permo-Triassic Sandstone aquifer WFD groundwater body and its overall status. We would advise, as under our response to Q1.9.1, where further investigations are required to understand existing conditions that these are undertaken at the earliest opportunity to support this assessment. Riparian enhancements could be secured at the Stanney Mill Brook and the River Gowy, achieved through the completion of WFD mitigation measures (see responses under Q1.4.3 and Q1.4.4 which are applicable with regards to further areas for consideration).

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		habitat and introduction of artificial bed material. Can the Applicant further explain what is meant by gravel augmentation and its implications to the management of watercourse silt? And how much artificial bed material is anticipated? Indicate the volume and the length of the brook impacted as well as the materials anticipated to be used. Has the inclusion of additional natural carbon sinks or water oxygen regeneration zones (or similar) to boost flora and fauna been considered at positions along watercourses? If not, state why not. The EA [RR-024] support the production of a Dewatering Management Plan and a Groundwater Management and Monitoring Plan. They wish to be a consultee on the approval of these plans. Can the Applicant confirm the provision within the DCO where the EAs request has been secured.	
Q1.10.11	Applicant, NRW and **EA**	It is noted that Section 6 of the Newbuild Infrastructure Boundary proposed by the DCO is not within a groundwater protection zone. Please confirm which sections of the pipeline would be located within ground water protection zones.	There are no bespoke groundwater Source Protection Zones (SPZ) within the Newbuild Infrastructure Boundary in England. It should be noted that the Environment Agency have only produced bespoke SPZ's for large potable water supply abstractions. All other groundwater sources used for drinking water supplies or in the production / manufacture of food intended for human consumption, we advise a default SPZ 1 of 50m radius from the point of abstraction, and in some cases a default SPZ 2 of 250m radius. We advise the applicant to review position statements B2 & B3 of 'The Environment Agency's approach to groundwater protection'.
Q1.10.12	Applicant and IPs, including NRW **EA,** CWCC and FCC	• The ExA notes that: - A transfer licence or impoundment licence may be necessary if a temporary or permanent structure is required that restricts the flow of a waterway/ watercourse.	We advise some mobile plants are permitted by the EA and, therefore, we require notification of deployment and will potentially plan an inspection. Contaminated soil that is (or must be) disposed of is waste. Therefore, its handling, transport, treatment and disposal are

		- An Environmental Permit may be required for the importation and treatment of waste material falling outside the scope or limits detailed in the ES. - With respect to any 'Waste Materials' generated, the consenting authority for certain mobile plant permits (such as concrete crushers) is the relevant local authority, and therefore they should be listed along with the relevant national public body within the draft DCO if such provision is anticipated. • **Applicant** Please provide clarification and an update on these matters, where applicable; • **IPs:** Comments in regard to the above are invited	subject to waste management legislation. If the total quantity of hazardous waste material produced or taken off-site is 500kg or greater in any 12 month period, the developer will need to register with the EA as a hazardous waste producer for the England section of the scheme. We advise this is recognised within the Other Consents and Licences [APP-046] document. If the applicant intends to abstract more than 20 cubic metres of water per day from a surface water source e.g. a stream or from underground strata (via borehole or well) for any particular purpose (i.e. dewatering activities) then an abstraction licence will need to be obtained from the EA for the England section of the scheme. We welcome the recognition that abstraction and discharges related to dewatering activities may require consent from the EA in the Other Consents and Licences [APP-046] document. In addition to the above, we advise under the Environmental Permitting (England and Wales) Regulations 2016, a FRAP or registered exemption is required for any activities which will take place: • on or within 8 metres of a main river (16 metres if tidal) • on or within 8 metres of a flood defence structure or culverted main river (16 metres if tidal) • on or within 16 metres of a sea defence • involving quarrying or excavation within 16 metres of any main river, flood defence (including a remote defence) or culvert • in a floodplain more than 8 metres from the river bank, culvert or flood defence structure (16 metres if it's a tidal main river) Certain activities are also potentially excluded from the requirement to obtain a FRAP or registered exemption. An Environmental Permit is required for discharges to surface water and / or groundwater if it is considered contaminated /

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			includes polluting substances. We advise this is clarified and separated from the requirements for FRAPs within Table 2.1 (No. 15) of the Other Consents and Licences [APP-046] document. We recommend the applicant undertakes pre-application advice with the EA's National Permitting Service Team to establish permitting / consenting requirements for the proposed scheme at the earliest opportunity.
Q1.10.14	IPs, including CWCC, FCC, NRW, **EA**, WW and United Utilities	• Provide your comments on any outstanding land contamination or pollution control matters arising if you have not already done so.	Further to our responses under Q1.10.4 and Q1.10.9, where any abstraction or dewatering takes place on land affected by contamination or where groundwater may be contaminated, it will need to be ensured that this contaminated water is disposed of in an appropriate manner or treated to such an extent that its discharge back to the environment will not have a negative impact on the receptor. An Environmental Permit may be required for such discharges. As highlighted under our responses to Q1.9.1, Q1.10.4, Q1.10.9 and Q1.10.10, additional ground investigation and assessment is required to aid in establishing the impacts of the proposed scheme and associated mitigation measures required. We would like to take this opportunity to identify that in parts of the pipeline corridor, where there is currently significantly industrial land use (Section 1 in ES Figure 18.2 Superficial and Bedrock Geology [APP-219]) there is a likelihood of not only standard (or expected) types of contamination to be present but also new and emerging type of contamination which are known to bio-accumulative and persistent in the environment (i.e. comments on contaminants in our response to Q1.9.1). As a result, if such contaminants are present in abstracted and / or dewatered liquid, it may not be suitable to discharge to the natural environment as it contains hazardous substances. We will be in a position to determine whether this is a significant consideration for

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			the scheme once the proposed additional ground investigation and assessment has been undertaken.
Q1.10.21	CWCC	Paragraph 11.6.112 of ES Chapter 11 (Land and Soils) [APP-063] identifies a high volatile organic carbon result within the Stanlow manufacturing complex and notes further assessment will be required. It is also noted further ground investigation works will take place prior to construction. The ExA would ask whether prior to construction for the further ground investigation works to take place is appropriate and, if not, when should such further ground investigation works take place.	Whilst we recognise this question has been directed to CWCC, considering our responses to Q1.9.1, Q1.10.4, Q1.10.9 and Q1.10.10 we request the ExA takes our comments on this matter into consideration from a 'controlled waters' perspective. The EA is aware of the ground conditions in and around the Stanlow Manufacturing complex through its ongoing regulation of this site under the relevant Environmental Permitting regime. We would strongly recommend that further ground investigation and assessment should take place at the earliest opportunity to fully understand existing conditions at this site. As highlighted in our response to Q1.9.1 and Q1.10.10, there is a likelihood of not only standard (or expected) types of contamination to be present but also new and emerging type of contamination where there is a possibility that remedial activities (and potentially consents under the Environmental Permitting regime) will be required prior to the commencement of construction. We will be in a position to determine whether any further work will be required once the additional ground investigation and assessment has been undertaken.
Issue Topic 11.	**Habitat Regulations Assessment**		
Ref.	**Question to**	**Examining Authority Question**	**EA Response to Question**
Q1.11.8	Applicant and **IPs**	Point out within the ES documentation (or elsewhere) where there are local strategic nature improvement or recovery strategies in the geographical area subject to the DCO that could potentially be used for the delivery of further ecological enhancement.	We refer to our responses under Q1.4.3, Q1.4.4 and Q1.4.7.

Issue Topic 14.	Noise and Vibration		
Ref.	**Question to**	**Examining Authority Question**	**EA Response to Question**
Q1.14.1	Applicant and **IPs,** including FCC and CWCC	• **Applicant** i) Outline how monitoring thresholds would be identified and implemented, and indicate whether the DCO should include a commitment to secure remedial measures should monitoring identify higher than predicted noise and vibration levels? ii) Can the Applicant explain if monitoring (and appropriate trigger levels) would be required to determine whether measures need to be implemented to further reduce noise? If so, how would these and any requisite remedial measures be secured? iii) How can noise/ vibration mitigation for ecology be relied upon as being suitable based on the information presently known? Or is further information expected? iv) Proved an update where necessary. • **Relevant Planning Authorities/ IPs:** v) Comment on the need for monitoring of construction/ operational phase noise and mitigation.	Whilst noise and vibration from the construction of the proposed development is recognised as potentially impacting the aquatic environment and / or fish within ES Chapter 9 – Biodiversity [APP-061], it is not clear how this has been assessed at this time. We are aware the aquatic environment has not been considered as a receptor within ES Chapter 15 - Noise and Vibration [APP-067]. We advise piling should be undertaken using vibratory methods. Any pile driving in or near water should be avoided, but if necessary then spawning and migratory periods should be avoided and mitigated with 'soft start' procedures and agreed fish relocation plans. We advise that there will be a requirement to monitor and mitigate construction / operation noise and vibration affecting legally-protected species.
Issue Topic 19.	**Draft Development Consent Order**		
Ref.	**Question to**	**Examining Authority Question**	**EA Response to Question**
Q1.19.20	**Relevant Statutory Undertakers**	• The ExA would ask relevant Statutory Undertakers for their comments in regard to the disapplication of the provisions set out in Article 8(1) of the draft DCO, which related to the powers to make bylaws under the Water Resources Act 1991 and the powers to make bylaws, the prohibition of obstructions, etc. in watercourses and	The effect of the disapplication provision would disapply the North West Region Land Drainage Byelaws, made 17th November 1977 (and enforced through the Water Resources Act 1991), in so far as the construction of any work or the carrying out of any operation for the purposes of or in connection with, the construction of the authorised development or any maintenance of any part of the

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		authorisation of drainage works in connection with a ditch under the Land Drainage Act 1991.	authorised development, is concerned. We do not object to the disapplication of these byelaws in principle. However, we request that a short form of protective provisions in favour of the EA are inserted into Schedule 10 of the draft DCO. This would be to ensure the maintenance by the Applicant of drainage works within the Order limits, (including Limits of Deviation), except where another person is liable to maintain the drainage works and that other person is not proscribed from doing so by the powers of the DCO. We will aim to provide suggested protective provision wording to the Applicant in advance of Deadline 2.

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Section 2: Environment Agency (EA) Written Representation

Summary

In addition to the EA's responses to ExQ1, further detail as pat of our Written Representation is provided on the outstanding issues for the ExA's and applicant's consideration. In summary:

- From a biodiversity perspective, it is unclear how the impacts of noise and vibration during construction works on the aquatic environment, in particular fish, has been assessed.

- With regards to determining ground conditions for the proposed scheme, we advise that the additional ground investigation and risk assessment work intended to be undertaken will determine whether there are requirements for remedial works and wider consenting / permitting considerations, particularly with regards to new emerging contaminants of concern if found to be present.

- To establish the impacts of each abstraction on water features identified, where an abstraction licence is required for proposed dewatering activities, a Hydrogeological Impact Assessment (HIA) will need to be undertaken to determine appropriate mitigation measures.

- We advise that wider consents and permitting requirements potentially required to be obtained from the EA are fully established.

- We advise amendments to the scope of the Water Framework Directive (WFD) Assessment [APP-165] are required.

- We advise consideration is given to whether the proposed scheme could contribute to and / or deliver the relevant WFD mitigation measures (*Annex 2*).

- We would highlight that an Emergency Plan to address how potential pollution spillages will be managed should be included in the Outline Construction Environmental Management Plan (OCEMP) [APP-225]..

- It is unclear at this time whether the proposed scheme may impact sites with existing Environmental Permits regulated by the EA. We note there is an intention for the surface water drainage proposals for the Stanlow Above Ground Infrastructure (AGI) to connect to the wider Essar Stanlow Refinery effluent network and advise further information is required to determine whether such proposals are feasible.

- In addition, the pipeline route is located within the permitted boundary for the Gowy Landfill. Whilst we note that waste is not stored within the area of the proposed pipeline route, we require further information to determine whether the existing infrastructure to facilitate the permitted activities will be impacted as a result of the scheme.

- With regards to the draft DCO [APP-024], under Part 2 ('Principle Powers') the 'Limits of Deviation' indicate the potential depth of the pipeline may be shallower than the EA's guidance for pipeline crossings below watercourses and existing flood defences. Understanding the fluvial dynamics of the proposed scheme area may also influence depths for the pipeline and should be considered as part of the determination.

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- We are aware under Article 8(1) of the draft DCO [APP-024] that the intended disapplication provision would disapply the North West Region Land Drainage Byelaws (made 17th November 1977). Whilst we have no objections, in principle, we would request a short form of protective provisions in favour of the EA in Schedule 10 of the draft DCO.

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We have the following additional comments for the Examining Authority's consideration as part of our Written Representation for the Hynet Carbon Dioxide Pipeline DCO Examination which we advise is read in conjunction with our responses to the ExQ1 in Section 1 of this letter (pages 2-23).

ES Chapter 9 - Biodiversity [APP-061]

As highlighted in our response to ExQ1, we are satisfied with the baseline surveys that have been undertaken to support ES Chapter 9 Biodiversity [APP-061]. As noted under our response to EXQ1 Q1.14.1, whilst noise and vibration from the construction of the proposed development is recognised as potentially impacting the aquatic environment and / or fish, it is not clear how this has been assessed at this time. Therefore, we request further clarification on how this has been assessed and therefore, establish whether the mitigation measures these impacts are appropriate.

ES Chapter 11 - Land and Soils [APP-063]

The majority of the pipeline corridor (Sections 1 to 3 in ES Figure 18.2 Superficial and Bedrock Geology [APP-219]) occupies land that appears not to have had any form of current or historic industrial land use, and therefore, the likelihood of adverse concentrations of contamination which may pose a risk to 'controlled waters' is low. However, ES Chapter 11 Land and Soils [APP-063] and associated appendices (ES Appendix 11.1 Phase 1 Land and Soils (Contaminated Land) Baseline Report [APP-117 to APP-120] and ES Appendix 11.6 Ground Investigation Report [APP-135 to APP-137]) identify that further ground investigation is needed either to confirm that the land does not have any adverse concentrations of contamination or where historic activity is identified, the exact land conditions are known.

We advise the latter of the two scenarios is particularly important for 'Section 1' (as shown in ES Figure 18.2 Superficial and Bedrock Geology [APP-219]) of the pipeline, where the proposed development will be located within the current Stanlow Manufacturing area. We are aware of the land contamination issues which may impact the construction and post-operational phases of the pipeline project. In this location, we are also aware that the general range of contaminants of concern that are identified in the current Ground Investigation Report [APP-135 to APP-137] do not include new and emerging contaminants of concern, including Per and Polyfluoroalkyl Substances (PFAS).

In areas identified as having the possibility of PFAS, as recognised in paragraph 15.2.1 of ES Appendix 11.6 Ground Investigation Report [APP-135 to APP-137] for the Stanlow area, we advise that these emerging contaminants of concern are added to the list of suitable determinants that require testing. We welcome the intention under the REAC [APP-222] to undertake additional investigation and assessment at the Stanlow Manufacturing Complex. However, we advise this is carried out at the earliest opportunity as the presence of PFAS, in certain circumstances, requires specialist

treatment / additional permitting requirements. Therefore, it would be beneficial to understand the nature and scale of PFAS contamination if found to be present to ensure additional considerations / mitigation that may be required are fully considered.

Wider to the proposed investigation on PFAS in the Stanlow Manufacturing area, where additional ground investigation work and assessment has been identified within ES Appendix 11.6 Ground Investigation Report [APP-135 to APP-137], we advise this work is undertaken to inform the DCO Examination Process and establish where further work (i.e. remedial requirements) may be necessary. As the nature and scale of contamination will be fully understood, this will determine measures that will need to be considered as part of the REAC and the OCEMP [APP-225] at this stage.

Further to the above, we would recommend under D-LS-022 of the REAC [APP-222], that further narrative on the decision to characterise contaminants which fall under the relevant GAC as being suitable for re-use within the DCO proposed development. Re-use criteria must be considered in terms of being fit for purpose and suitable for use at their destination location. Where this location is close to a sensitive receptor, this classification may not be adequate without further suitable risk assessment.

ES Chapter 18 - Water Resources and Flood Risk [APP-070]

We note Table 18.2 includes elements that have been scoped-out of the assessment under the Water Resources and Flood Risk chapter. For groundwater, whilst we agree that secondary (undifferentiated) aquifer (paragraph 18.6.11) are generally of low sensitivity, due to the variable nature of the deposits, and where higher permeability deposits may occur in continuity with surface water courses, they can often be locally important form an important source of baseflow. We would, therefore, advise consideration is given as to whether this should be scoped-in to the assessment to ensure the impacts of the pipeline construction on these deposits are considered as part of any dewatering assessment or groundwater management plan.

Further to the above, we note in paragraph 18.6.37 and 18.6.38 of ES Chapter 18 Water Resources and Flood Risk [APP-070], the BGS Hydrogeological Map of Clwyd and the Cheshire Basin has been utilised to support groundwater investigations which was published in 1989. It represents an estimate of the groundwater levels at that time. This should not be relied on as a contemporary estimate of current groundwater levels in the aquifer for site-specific work. Groundwater levels will rise and fall over time in response to increases and decreases in abstraction and recharge. Site-specific data should be used in any assessments for groundwater management and dewatering.

Similarly, the Environment Agency Groundwater Contours are an estimate of groundwater levels based on regional scale groundwater level monitoring network data at a point in time (paragraph 18.6.38). The last update to this monitoring data is from September 2017. They provide an estimate and should not be used for site-specific assessments.

We acknowledge a high-level Hydrogeological Risk Assessment has been produced as part of Appendix 18.2 Summary of Effects [APP-164]. However, this information does not currently include sufficient detail to assess the impacts of each proposed abstraction along the route. A HIA is required to assess the potential impacts of the dewatering operation on any water features identified in support of an abstraction licence. The HIA will include an assessment of any necessary mitigation measures that will be required should an impact be identified.

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We advise the Environment Agency position statement on the Temporary Dewatering from Excavations to Surface Water: RPS261 only applies to the discharge of uncontaminated rainwater that has accumulated in open excavations (paragraph 18.10.6 and 18.10.7). It does not apply to excavations where the abstracted water is wholly or mainly a groundwater infiltrating into the excavation. On abstraction licence exemptions (paragraph 18.10.7), an exemption only applies to an abstraction from a 'sump or excavation' as it is only intended to cover shallow workings. We advise the wording is amended to reflect the potential requirements for consents and permits for the dewatering activities where it is not clear at this time that exemptions would apply.

We would highlight, in relation to the comment under paragraph 18.6.68 of ES Chapter 18 Water Resources and Flood Risk [APP-070] on the role of the Ince pumping station, it should be noted that this asset is considered as a legacy land drainage pumping station only, with neither capacity nor remit to prevent fluvial flood risk of Ince Marsh under extreme flood conditions and request this is recognised as part of the assessment.

Further to the above, we have additional detailed technical comments with regards to ES Appendix 18.3 - Water Framework Directive (WFD) Assessment [APP-165] and ES Appendix 18.4 Flood Risk Assessment (FRA) [APP-166-167] specifically. We advise where amendments are made to these reports that this is reflected within the ES Chapters where applicable.

ES Appendix 18.3 - Water Framework Directive (WFD) Assessment [APP-165]

Further to our responses under Q1.4.3 and Q1.4.4, we would highlight that the RBMPs were updated in December 2022 which should be reflected within the WFD Assessment [APP-165]. We expect no significant changes in the WFD element level classification between 2019 and 2022 as included within the current WFD Assessment [APP-165]. However, we would highlight to the applicant that updated data will be available on the Catchment Data Explorer, in line with the recent RBMP updates. This is anticipated to be accessible by mid-May.

We are satisfied with the hydromorphology surveys undertaken in October 2021 and November 2021 to inform the WFD Assessment [APP-165]. We note the aquatic surveys undertaken and as detailed under ES Appendix 9.9 Aquatic Ecology (Watercourses) Survey Report [APP-113] has been used to support the WFD Assessment [APP-165]. We are satisfied with the survey methods used where the results seem to present a fair reflection of the current state of the water bodies impacted by the proposed scheme.

We would highlight the WFD quality element for river water bodies is 'macrophytes & phytobenthos' not 'macrophytes and phytoplankton'. This is an important distinction since the former are bottom dwelling and largely fixed while the latter are free-floating and highly mobile (especially where there is any flow). However, we would not normally use phytobenthos on lowland, high alkalinity rivers as the relationship between phytobenthos community composition and nutrient status tends to break down at high alkalinity. We would request further commentary is provided to establish why phytoplankton has been utilised as a WFD quality element in this instance.

Table 3.4 of the WFD Assessment provides the scope of WFD quality elements for the Operational Stage of the DCO development where 'macrophytes and phytoplankton' have been scoped-out of the assessment for 'culvert replacement and extension' and the 'drainage and outfall' proposals. We advise that macrophytes and phytobenthos

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(phytoplankton if this is to remain as part of the WFD quality element) have the potential to be impacted by such proposals and advise this is 'scoped-in' to the WFD assessment.

We note Table 5.11 establishes WFD mitigation measures in relation to the DCO proposed development. The table indicates that the only structural modifications proposed are open cut crossings, however, we would advise the proposed new outfalls and culverting are also considered physical modifications to the water body. Therefore, the 'Justification' section should refer to such works to ensure mitigation measures for these proposals are fully recognised.

Whilst it is acknowledged that temporary culverts may be required for construction works, we advise this should only be considered where it is necessary and where alternative solutions are deemed not feasible. Paragraph 1.3.24 suggests the existing culvert on Elton Land Ditch 1 will be replaced by a longer culvert for access purposes for the operational stage. We request further details on the necessity for the new culvert at Ince Marshes and whether alternative provisions for access could be provided.

Further to the above, and as highlighted in our response to the ExQ1, we request the applicant uses the baseline surveys and associated understanding of fluvial dynamics to:

- Inform appropriate pipeline alignment and minimum depth of cover, including evidence that local dynamics, particularly hydromorphology, have been accounted for;
- Identify wider enhancement within the study area to offset impact, contribute to the attainment of 'good' status under the WFD; and
- Support / contribute to the delivery of WFD mitigation measures (i.e. the re-naturalisation of the Gowy) as outlined in *Annex 2*.

As highlighted in our response to ExQ1, we recognise the opportunity to contribute / deliver WFD mitigation measures as part of the proposed scheme could potentially support the provision of additional Biodiversity Net Gain (BNG).

ES Appendix 18.4 Flood Risk Assessment (FRA) [APP-166-167]

The FRA outlines the intended pipeline crossings for watercourses (Table 1) and existing flood defences (Table 2). There are 10 confirmed 'main river' crossings, 9 of which are confirmed as using open-cut techniques and the crossing below the River Gowy will be undertaken by trenchless (directional drilling) method. We advise the trenchless method for the River Gowy should also include a design to ensure construction extends below the adjacent flood defence embankments in existence at this location.

We accept the overall considerations, proposed mitigation and conclusions presented in the FRA in line with the requirements of associated planning policy / guidance. It is accepted that the proposed development is classified as 'Essential Infrastructure' under the National Planning Policy Framework's Flood risk vulnerability classification (Annex 3). The assessment of flood risk relating to the AGIs and Block Valve Stations (BVS) to facilitate the scheme are considered appropriate. We note the proposed slab level for the Ince AGI will be raised as a flood protection measure within the defended tidal floodplain, which we deem as acceptable in principle.

Where the FRA does defer to further detailed design approval in relation to areas where

the pipeline intersects with the 'main river' network and associated flood risk assets / infrastructure, it is accepted and acknowledged that additional applications for Flood Risk Activity Permits (FRAPs) and / or exemptions in relation to both temporary and permanent works will be made.

Outline Construction Environmental Management Plan (OCEMP) [APP-225] and Other Consents and Licences [APP-046]

We welcome the intention to produce a suite of management plans / reports as part of a CEMP to establish how risks to the environment will be minimised during the construction of the proposed scheme and included as Requirement (5) under the draft DCO [APP-024].

We recognise the OCEMP [APP-225] and OCEMP Appendix 1 Outline Soil Management Plan [APP-226] are currently high-level documents. We accept that these documents will be subject to change, particularly once the detailed designs are realised, however, at this time we request details from the additional ground investigation and assessment work to be undertaken are used to inform the OCEMP. As highlighted under our comments to 'ES Chapter 11 - Land and Soils [APP-063], the additional investigation / assessment will inform requirements for the OCEMP, particularly with regards to determing what consents / permits may be required and providing outline considerations for overall material management.

Further to the additional work, we advise that the OCEMP includes provision to include an Emergency Plan to address how potential pollution spillages will be managed during construction works as a stand-alone document / annex to the CEMP. Appropriate procedures, training and equipment should be provided for the site to adequately control and respond to any emergencies including the clean up of spillages, to prevent environmental pollution from the site operations. Such measures as outlined above should be considered within the REAC and CEMP.

As identified in our responses to the ExQ1 and under our comments to ES Chapter 18 - Water Resources and Flood Risk [APP-070], the main risk to groundwater and any groundwater dependant water features is from the anticipated dewatering activities during the construction phase. The applicant has been made aware of the need to carry out a detailed HIA for each proposed dewatering abstraction and the requirement to obtain an abstraction licence in advance of carrying out any dewatering unless an exemption applies.

We expect that further detail on the locations where dewatering is proposed will be provided in the Dewatering Management Plan and the Groundwater Monitoring and Management plan at the detailed design stage as part of the CEMP. The Plans will need to provide a detailed assessment of where an abstraction licence will be required, or where it is anticipated that dewatering can take place under Regulation 5 of the Water Abstraction and Impoundment (Exemptions) Regulations 2017.

Where an exemption applies we would expect the Dewatering Management Plan to include an assessment of the likely hydrogeological impacts of the abstraction on water features and water users along with any proposed mitigations to demonstrate compliance with the conditions of the exemption. Whilst the impact of this dewatering is expected to be short term, it is important to ensure that all water features are protected throughout the construction phase of the development.

Where any abstraction or dewatering takes place on / in land affected by contamination,

or where groundwater may be contaminated, it will need to be ensured that this contaminated water is disposed of in an appropriate manner or treated to such an extent that its discharge back to the environment will not have a negative impact on the receptor. The applicant is aware an Environmental Permit for this discharge activity may be required.

We welcome the recognition that an impoundment licence may be needed for the proposed construction works, particularly in relation to the open cut watercourse crossings. If an impoundment licence is required in the England section of the scheme, this will need to be obtained from the EA. Therefore, we advise the EA are recognised in the Other Consents and Licences [APP-046] document as the consenting organisation for impoundment licences for the England section of the scheme.

We advise the Other Consents and Licences [APP-046] document recognises that an Environmental Permit for waste activities may potentially be required under the Environmental Permitting (England and Wales) Regulations 2016 from the EA as the consenting body for the England section of the scheme.

If there is an intention to store imported waste material, this will need to be addressed within the Materials Management Plan and Waste Management Plan anticipated to be produced as part of the detailed CEMP. The storage of such material will likely require permission from the EA in the form of an Environmental Permit unless storage is strategically planned in multiple locations that would fall within waste exemption limits. If there is an intention to store waste materials near a watercourse, we advise the usual policy is to rotate every 12 months to a different location.

It is not clear whether the Environmental Protection (Duty of Care) Regulations 1991 has been considered with regards to off-site movements of waste. The regulators for the duty of care are the EA in England and Natural Resources Wales (NRW) in Wales and local authorities. The code of practice applies to if the developer produces, carries, keeps, disposes of, treats, imports or has control of waste in England or Wales. We advise the applicant considers this piece of legislation with regards to the management of waste as part of the construction activities and is reflected within the CEMP, where it is recognised a Material Management Plan and Waste Management Plan is intended to be produced.

In addition, we welcome the acknowledgment within the Other Consents and Licences [APP-046] document with regards to FRAP requirements under the Environmental Permitting (England and Wales) Regulations 2016. However, we would advise that a FRAP may not be required for ‘all’ temporary and permanent works as highlighted.

We advise under the Environmental Permitting (England and Wales) Regulations 2016, a FRAP or registered exemption is required for any activities which will take place:

- on or within 8 metres of a main river (16 metres if tidal)
- on or within 8 metres of a flood defence structure or culverted main river (16 metres if tidal)
- on or within 16 metres of a sea defence
- involving quarrying or excavation within 16 metres of any main river, flood defence (including a remote defence) or culvert
- in a floodplain more than 8 metres from the river bank, culvert or flood defence structure (16 metres if it’s a tidal main river)

Certain activities are also potentially excluded from the requirement to obtain a FRAP or

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registered exemption.
Further to the above, an Environmental Permit, or registered exemption, is required for discharges that include polluting / contaminative substances to surface water or to ground. We advise this is clarified and separated from the requirements for FRAPs within Table 2.1 (No. 15) of the Other Consents and Licences [APP-046] document.

We would advise the applicant understands the permitting / consenting requirements for the scheme and seek pre-application advice at the earliest opportunity.

Outline Surface Water Drainage Strategy [APP-241]

The Outline Surface Water Drainage Strategy [APP-231] provides an overview of the potential surface water drainage proposals for the AGIs as part of the proposed development. We note the surface water drainage proposals for the Stanlow AGI (paragraphs 6.3.14 to 6.3.24) is intended to connect to the wider existing Essar Stanlow Refinery's effluent network.

It is not clear at this time whether this is a feasible option and would request further clarification on the potential implications on the existing effluent network. The EA are involved in the regulation of the Stanlow Refinery site with particular regards to the Environmental Permits associated with the discharge activities. Therefore, if the intention is to connect to the existing drainage system where the outfall is managed under an existing Environmental Permit, further assessment on the suitability of discharging to this network may be required. Further to this, it will be the operator's responsibility to seek a variation of the existing Environmental Permit to include alterations to the existing effluent network if the drainage from the Stanlow AGI is to be incorporated.

We advise for all surface water drainage proposals that approved Document Part H of the Building Regulations 2010 establishes a hierarchy for surface water disposal. The first option for surface water disposal should be the use of SUDS which encourage infiltration, such as, soakaways or infiltration trenches. In all cases, it should be established that these options are feasible, can be adopted, properly maintained and would not lead to any other environmental problems. This should be informed by the ground investigation and assessment work for the proposed scheme. Where the intention is to dispose to soakaway, such proposals should be shown to work through an appropriate assessment carried out under Building Research Establishment (BRE) Digest 365.

In regards to 'Section 1' (as shown in ES Figure 18.2 Superficial and Bedrock Geology [APP-219]) specifically, we would advise that, given the likely ground conditions that will be encountered, no infiltration of surface water drainage into the ground is likely to be possible other than with agreement from the relevant authority. Agreement may be given for those parts of the pipeline project where it has been demonstrated that there is no resultant unacceptable risk to 'controlled waters'.

In addition, where surface water drainage is collected from areas that may be subject to contamination, such as, fuel storage areas, industrial sites and the AGIs, it will need to be ensured that this water is not discharged to ground without prior treatment to remove any hazardous substances. Any SUDS features employed in the treatment train should be lined or set in impermeable ground to prevent the discharge of contamination to ground. We advise the applicant to review position statements G1 & G10 to G13 of the 'Environment Agency's Approach to Groundwater Protection'.

Gowy Landfill

We advise that the permitted boundary of the Gowy Landfill is located within the DCO Order Limits and along the proposed pipeline route. We are aware the north of the site, where the pipeline route is proposed, is not used for waste storage. However, we are aware that there is underground drainage and monitoring infrastructure within this area to facilitate the associated permitted activities.

We request clarification on whether the applicant has consulted the permit holder and established whether the pipeline route will affect the operator's ability to monitor and / or whether the pipeline route could impact the operator's ability to comply with their existing Environmental Permit.

Control of Major Accident Hazards (COMAH) sites

We are aware the pipeline scheme is located in close vicinity or within COMAH establishment site boundaries (Exolum Pipieline System Ltd at Backford North and the Stanlow Manufacturing Complex / Refinery respectively). The COMAH Regulations 2015 places a general obligation on the duty holder to ensure all measures necessary are taken to prevent major accidents and to limit their consequences for human health and the environment. The provisions of the COMAH Regulations 2015 are enforced by the Competent Authority (CA), the Health and Safety Executive (HSE), and relevant environmental regulator, which is the Environment Agency (EA) in England.

The Stanlow AGI is proposed to be located on the Stanlow Manufacturing Complex / Refinery where Essar Oil (UK) Ltd operates an upper-tier COMAH establishment. It is noted in ES Appendix 13.2 ES Risk Record [APP-134], under 'risk record 7', mitigation measures against potential damage to the Stanlow AGI in the event of a major accident at the Refinery has been considered. This includes interface management between the undertaker and the Stanlow Refinery operator (Essar Oil (UK) Ltd).

Exolum Pipeline System Ltd, operates an upper-tier COMAH establishment at Backford North in proximity to the proposed development. It is noted under 'risk record 15' that mitigation measures against potential damage to the Rock Bank BVS in the event of a major accident at the Backford North COMAH establishment (formerly CLH Pipeline System Ltd) has been considered.

Overall, we welcome the considerations detailed in ES Appendix 13.2 ES Risk Record [APP-134] with regards to the Stanlow Manufacturing Complex and Backford North COMAH establishments.

Draft Development Consent Order (DCO) [APP-024]

We have the following initial comments and requests for clarification on the draft DCO [APP-024]:

With regards to potential depths of the pipeline, we understand such proposals will be established at the detailed design stage. However, we note the following within Part 2 ('Principle Powers') of the draft DCO [APP-024] included under the 'Limits of deviation' as follows:

Limits of deviation

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6.— (1) In carrying out or maintaining the authorised development, the undertaker may — …

(b) deviate the pipeline works vertically upwards to a limit of not less than 1.2 metres below the surface of the ground (except where ground conditions make compliance with this upwards limit impracticable in which case the upwards limit is 0.452 metres below the surface of the ground); …

From the information currently presented, it is not clear where the pipeline will need to be located at shallower depths above 1.2m below the surface of the ground. We would highlight that the EA's guidance requirements for pipeline crossings below all watercourses, rivers and assets require a minimum 1.2m of cover between the hard bed of the watercourse / river to the crown of the pipe. Therefore, we request further information is provided to determine where ground conditions may influence the depth of the pipeline to ensure crossings below watercourses and existing flood defences are no higher than 1.2m above ground.

Further to establishing where ground conditions may impact the depth of the pipe at certain locations, as highlighted under our comments on ES Chapter 18 - Water Resources and Flood Risk [APP-070] and the WFD Assessment [APP-165], an understanding on fluvial dynamics (i.e. hydromorphology of watercourses) affected by the proposed development may also influence / establish appropriate depths for the pipeline to ensure impacts on the environment are minimised.

We are aware under Article 8(1) that the intended disapplication provision would disapply the North West Region Land Drainage Byelaws (made 17th November 1977), in so far as the construction of any work or the carrying out of any operation for the purposes of or in connection with, the construction of the authorised development or any maintenance of any part of the authorised development, is concerned. As highlighted in our response to ExQ1 Q1.19.20, we have no objections, in principle, to the disapplication of these byelaws. However, we would request a short form of protective provisions in favour of the EA in Schedule 10 of the draft DCO where we will aim to provide suggested wording to the applicant in advance of Deadline 2.

Whilst a majority of the pipeline route appears to be located through undeveloped or agricultural land, there remains the possibility that unsuspected contamination may exist which may not be identified during the main phases of ground investigation and assessment. In this circumstance it is important to fully understand the nature of the unsuspected ground conditions or anomalies that may have been found and deal with them in a way that does not introduce further risk or adverse impacts on the environment. Therefore, we welcome this consideration within the draft DCO [APP-024] under Requirement 9 (Contaminated land and groundwater).

However, we would advise that draft DCO Requirement 9 does not take into account the current and anticipated ground investigation / risk assessment work. Our current understanding from the information submitted does not conclude that remedial works will not be required prior to construction and therefore, we do not agree at this time that considerations to deal with unsuspected contamination only under Requirement 9 is acceptable. As highlighted in our response to the ExQ1 (Q1.9.1; Q1.10.4; Q1.10.9; Q1.10.10), the additional ground investigation / assessment work is essential in determining whether remediation and / or additional work / considerations will be required prior to the commencement of construction works.

Further to the above, we wish to highlight to the ExA under 'Schedule 2 –

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Requirements', in addition to draft Requirement 8 (Surface water drainage), the EA ask to be a consultee on Requirements 5 (Construction environmental management plan) and 9 (Contaminated land and groundwater). In addition we would wish to be consulted on Requirement 11 (Landscape and ecological management plan), in so far as this relates to proposals associated with watercourses / flood defence assets.

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Should you have any queries, or wish to discuss the matters raised in this letter, then please do not hesitate to contact me.

Yours sincerely

Ms Anne-Marie McLaughlin
Planning Advisor

Direct e-mail[redacted]@environment-agency.gov.uk

Annex 1 – EA Programme of Flood Risk Management Schemes

NPN (default) / Project ID	Project Name	Lead Risk Management Authority - Name	County
2020/21-001126	Clifton Villas, Backford	Cheshire West and Chester Council	Cheshire
2020/21-001123	Adder Hill Great Boughton	Cheshire West and Chester Council	Cheshire
2020/21-001127	Hooton Green, Ellesmere Port	Cheshire West and Chester Council	Cheshire
2020/21-001125	Badgers Rake Lane, Little Sutton	Cheshire West and Chester Council	Cheshire
2020/21-001124	Hinderton Road, Neston	Cheshire West and Chester Council	Cheshire
2020/21-001122	Abbots Mead Industrial Estate, Chester	Cheshire West and Chester Council	Cheshire
2020/21-008115	Cheshire-Mid-Mersey Quick Win Projects	Cheshire West and Chester Council	Cheshire
2019/20-000061	River Dee SSSI remedies	Environment Agency	Cheshire
2019/20-000130	Penketh and Whittle FRM Scheme	Environment Agency	Cheshire
2020/21-004793	Com NFM - Slowing the Flow - Greater Scope for Delivery - Upper Dean	Environment Agency	All English counties covered by project
2020/21-001342	Pipeline Priority Ditton Brook Halewood inc Asset Replacement	Environment Agency	Merseyside, Cheshire
2020/21-001341	Pipeline Priority Ditton Brook Halebank inc Asset Replacement	Environment Agency	Merseyside, Cheshire

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Annex 2 – HMWB WFD Mitigation Measures

Gowy (Milton Brook to Mersey): GB112068060250								
Action ID	**MMA**	**Description**	**Reference**	**Complexity**	**Ecological**	**Easting**	**Northing**	**NGR**
35564	MMA We1075: Remove obsolete structure	Remove Withy Beds Weir	River Gowy_WO14	Medium	Medium	343124	374068	SJ4312474068
35655	MMA We1076: Improve floodplain connectivity	Set back or remove raised grassland embankments	River Gowy_WO15	Medium	Medium	343108	373890	SJ4310873890
36681	MMA Wo1495: Gowy meadows: Improve floodplain connectivity	Set back or remove raised grassed embankment (right/east bank d/s of M56)	Wo1495	Low	High	343406	373468	SJ4340673468
35563	MMA Wo1074: Enhance ecology	Set back or remove left/west grassed embankment (left-hand bank u/s of M56)	River Gowy_WO13	High	Medium	343565	372532	SJ4356572532
36726	MMA Wo1765: Wervin Meadows: Preserve and restore riverine habitat.	Wervin meadows (left/west bank u/s of M56)	We1073	Low	Medium	343565	372532	SJ4356572532
Stanney Mill Brook: GB112068060260								
Action ID	**MMA**	**Description**	**Reference**	**Complexity**	**Ecological**	**Easting**	**Northing**	**NGR**
35203	MMA We0338: Improve floodplain connectivity	Set back or remove grassed embankments	Stanney Mill Brook_WO2a	High	Medium	343365	372379	SJ4336572379
35201	MMA We0326: Improve in-channel habitats	Improve in-channel morphological diversity	Stanney Mill Brook_WO1	Low	Medium	343528	372068	SJ4352872068

End