

Cefas comments for action

### **Benthic Ecology**

1. In Section 5.2 of the document PC1084-RHD-SB-EN-NT-EV-1142 MLA/2020/00506/2 South Bank Quay MLV2 Appraisal of Environmental Effects, it states “Given the changes requested as part of MLV2 apply to construction activities only, operation effects are not considered further within this section”. I cannot currently decide whether the changes to the dredging amounts and locations under MLV2 will bring about different indirect effects associated with altered hydrodynamic conditions which may result in modified changes to the erosional/depositional characteristics of the area relative to the original marine licence. ***Can the applicant please confirm that this has been considered and that such operational (indirect) effects associated with MLV2 have been considered and can be ruled out?***
2. In Section 5.2.1, it states “However, the confidence in this habitat classification is low according to Defra’s MAGIC interactive mapping tool. This confidence level is supported by reviews of site observations, habitat surveys and photographs, which have identified that areas classified as mudflat are often not actually mudflat”. ***Can the applicant provide greater clarity on the robustness of this evidence? Can the photographs be provided?*** This is important as the applicant is indicating that the observed habitat is not actually the mudflat as predicted and the significance of impact of habitat loss is pivotal on this assertion.
3. In Appendix D of the above-cited report, the updated modelling outputs infer that the physical impacts associated with placement of dredged material at random locations within the disposal sites are reduced compared to continued placements at the same location. Thus, will there be a licence condition for the applicant to ensure that each placement is ‘strategic’ (gridded or otherwise) within the disposal site if the modelling does indeed support this?

### **Shellfish**

4. The applicant has provided further information on changes in marine water quality and direct loss / alteration of habitat and food sources in the note MLA/2020/00506/2 South Bank Quay MLV2 Appraisal of Environmental Effects. Sections 4.2.1 and 4.2.2 of the note are focused on finfish and do not provide direct information regarding shellfish. The applicant concludes that the effect of changes requested under MLV2 would not result in any material change to the

significance of effect recorded at the time of writing the EIA Report with respect to shellfish receptors (minor adverse).

5. Title of Table 4.2, "Summary of findings from the original EIA Report and with consideration of MLV2 with regard to effects on fish" (p10, PC1084-RHD-SB-EN-NT-EV-1142). The topic of table mentions fish and shellfish.
6. On page 12 (PC1084-RHD-SB-EN-NT-EV-1142), the applicant mentions "Epifaunal surveys identified that the most abundant species was shrimp. *C. maenas* and *A. alba* were also abundant.". I would like to note that *C. maenas* should be identified as a crab in this sentence. I acknowledge that is correctly identified in the rest of the note.

### **Fish and Fisheries**

7. Section 4.2.2 of document PC1084-RHD-SB-EN-NT-EV-1142 discusses direct loss and alteration of habitat and food sources as a result of the removal of existing structures obstructing the construction of the scheme. The Applicant considers that direct loss and alteration of habitat and food sources as a result of the removal of existing structures, is "offset by the relatively small area of such habitat being affected (~2ha) and the fact that numerous other intertidal locations and sheltering structures exist within the vicinity and wider Tees estuary". However, there is no discussion of the effects of direct loss and alteration of riverbed habitat as a result of dredging activities within this section. In my opinion, this is not a suitable assessment of the effects of direct loss of habitat and alteration of habitat, as the total area of habitat impacted by the planned activities (i.e., including riverbed habitat affected by dredging) is not assessed. Given that MLV2 is proposing that an additional 445,000m<sup>3</sup> of material be dredged (29,000m<sup>3</sup> of material from the Tees Dock Turning Circle, and 416,000m<sup>3</sup> from the channel and berth pocket), a much clearer explanation of the total area of habitat impacted is needed. I recognise that a brief summary of the marine licence and subsequent applications is provided within document 5 (Table 1.2), however this does not include numerical values of the area of habitat impacted, nor the dredge volumes permitted at each stage. I ask that the Applicant please provide a table which presents specific values for the worst-case scenarios of the total area of habitat lost or altered (inclusive of dredging activity and other activities), alongside the total amount of material proposed to be removed, under the environmental statement (ES), MLV1 and MLV2. Given the number of changes made and consultation cycles held since the original application, in my opinion, it is necessary to demonstrate how the scope of the works and

associated dredging activity has changed between the original ES and subsequent variations (an example of the type of table needed is provided in Annex 2).

8. Cefas fisheries advisors have raised concerns in relation to impacts on fish from increased suspended sediment concentrations during previous consultations, and I noted in my previous advice that “it would be helpful if the Applicant could please provide a more detailed reassessment or discussion of how the additional dredged material is likely to compare with the suspended sediment concentrations and plumes modelled within the original EIA, in order for me to determine whether impacts from the proposed variation are sufficiently negligible”. I note from recent advice by Cefas Coastal Processes advisors (provided during consultation for MLV1 in relation to the Hydrodynamic and Sediment Plume Modelling Technical Note), that “the Applicant has stated that the overall footprint within the river is reduced (due to considering only Phase 1) so the impacts are reduced relative to those previously assessed. I wish to note that it is not clear if the overall impact of phase 1 and 2 will have increased relative to the ES”. I agree that it remains unclear whether the combined dredge volumes of Phase 1 and Phase 2 (inclusive of the additional dredge quantities proposed under MLV2) will remain within the scope of the original EIA assessment. I recognise that the Applicant has provided the Hydrodynamic and Sediment Plume Modelling Technical Note within this consultation, however, to the best of my knowledge this document was prepared in support of MLV1 and it is unclear whether the additional dredge quantities proposed under MLV2 are adequately reflected in this assessment. As such, I am not certain that my original concern has been adequately addressed, and I would ask the Applicant to please provide a side-by-side comparison of the suspended sediment concentrations and plumes modelled within the original EIA, with the most up to date modelling which take into account the additional dredge volumes. Please refer to comment 20ii below for further detail. Please note that I am not recommending additional modelling is necessary at this stage.
9. Document PC1084-RHD-SB-EN-NT-EV-1141 MLA/2020/00506/2 South Bank Quay Further Information Request 19 Response section 3.6, states that “as noted in the Hydrodynamic and Sediment Plume Modelling Technical Note submitted to support Variation 1, the capital dredging with the CSD will take approximately 9 weeks. This duration does not account for any weather delays. The current CSD programme for the work starts on 30th January 2023”. The Applicant’s response directs me to the Hydrodynamic and Sediment Plume Modelling Technical Note provided as Appendix D in document 5 in which an overview of the proposed dredging schedule for MLV1 is presented in section 3.4.2. The technical note details how 1.2 million m<sup>3</sup> of bed

material is to be dredged over the nine-week dredging period, however, the dredging schedule provided relates to dredging activities permitted under MLV1. To my understanding, as changes to the quantity of material to be dredged were not requested under MLV1, the dredging schedule provided does not reflect the additional dredge quantities proposed under the current variation (MLV2). It remains unclear as to whether a higher intensity dredging schedule will be implemented in order for the dredging to be completed within the quoted 9 week timeframe, or whether a longer dredging schedule will be required to remove the new total volume of material (i.e. including the additional material proposed under MLV2). I recommend the Applicant presents a table detailing how they expect to remove the total dredge volume for Phase 1 of the project (which clearly indicates the additional volumes proposed under MLV2) or provide a clear explanation of how and where the additional volume has already been accommodated within the dredging schedule provided, if this is the case.

10. Previous comments provided by Cefas fisheries advisors, in relation to the cumulative impact assessment in the original EIA for South Bank Quay (SBQ), identified a number of other projects with dredging elements (including the Northern Gateway Container Terminal (NGCT), Anglo American Harbour Facilities (AAHF), and Tees GasPort which was under application at the time of writing the SBQ EIA, among others) which may interact cumulatively. To the best of my knowledge these concerns were not directly addressed in subsequent consultations. In my opinion, the MMO's acceptance of the Applicant's letter (Appendix A of document 6), electing to comply with option b of licence condition 5.2.13, is not a sufficient answer to my original concern. The reason for this is, firstly, the wording of condition 5.2.13 considers that simultaneous capital dredging campaigns by SBQ and the NGCT to remove material from the Tees estuary are permitted, provided that the total quantity of material to be disposed of does not exceed the set limit. I do not believe that this addresses my concerns in relation to cumulative impacts to fish from simultaneous dredging activity within the Tees estuary as the impacts to fish associated with dredging (i.e., removal of material by dredging) are different to those associated with disposal (i.e., deposition of material at the disposal site). Secondly, it is not clear to me where the limit of 1.34million m<sup>3</sup> has been drawn from as I cannot find reference to this figure in the EIA (document 8). I recognise that the marine licence issued in relation to this project carries various conditions which require the Applicant to liaise with other operators, spatially restrict dredging to one side of the channel at any one time, impose a seasonal restriction on dredging activity, and carry out a scheme of monitoring. However, in order to address my concerns, an overview or timeline of how the South Bank Quay works fit within the

wider dynamic environment of development works in the River Tees is needed to put the project works into the context of other activity (particularly dredging activity) within the estuary.

11. There is a long and complex history of consultation attached to the South Bank development and it is clear that dredging is frequently undertaken within the Tees estuary, whether in direct association with any given development or through routine maintenance dredging. In my opinion, the evidence provided by the Applicant as a standalone response within this consultation, is not sufficient for me to make an informed decision. There have been substantial changes to the scope of this development since the original EIA and, in my opinion, it would take significant consideration of the entire case history in order to determine whether the impacts to fish from the current scope of the development remain within the envelope of those originally assessed under the current EIA. This would be a significant undertaking which I estimate would require at least 3 full days. As such, I will not make further comment on this point until the information requested is provided.

**Annex 2 Template for a table comparing total impacted habitat.**

|  | EIA Report (Total) | EIA Report (Phase 1 only) | EIA Report (Phase 2 only) | MLV1 | MLV2 |
|--|--------------------|---------------------------|---------------------------|------|------|
| <i>Direct loss or alteration of habitat</i>  |                    |                           |                           |      |      |
| Area of habitat directly lost /altered by removal of existing structures m <sup>2</sup> / km <sup>2</sup>                  |                    |                           |                           |      |      |
| Area of habitat directly lost /altered by dredging activity m <sup>2</sup> / km <sup>2</sup>                               |                    |                           |                           |      |      |
| <i>Dredging Activity</i>   |                    |                           |                           |      |      |
| Amount of material to be <i>dredged</i> from River Tees within the scope of each assessment m <sup>3</sup>                 |                    |                           |                           |      |      |
| Amount of material to be <i>disposed of</i> at Tees Bay C disposal site within the scope of each assessment m <sup>3</sup> |                    |                           |                           |      |      |
| Amount of material to be excavated to land within the scope of each assessment m <sup>3</sup>                              |                    |                           |                           |      |      |