



THE MARINE AND COASTAL ACCESS ACT (2009): TEES, SOUTH BANK QUAY, PHASE I, MIDDLESBROUGH, UK.

Reference Number: MLA/2020/00506

From: Cefas, Lowestoft Laboratory

Date: 21st January 2021 Tel: 01502 524513

E-mail: benthicconstruction@cefas.co.uk regulatory_assessment@cefas.co.uk

To: Emmanuel Mulenga - MMO (via MCMS)

Cc: Joe Perry - SEAL Case Officer, Cefas

- 1. With reference to the above proposal and your request for comments dated 23rd December 2020, please find below my advice in my capacity as advisor on marine benthic ecology.
- 2. My comments pertain to the conservation and health of marine benthic invertebrate communities and do not include any reference to other ecological components (e.g., saltmarsh, birds, fish, mammals) or other physical (e.g., morphology, bathymetry) or chemical (sediment or water quality) aspects of the environment as, whilst these are within Cefas' remit, they are outside my area of specialism.
- 3. In providing my advice, I have used 3.75 hours of the allotted 3.75 hours for this request. I have booked my time to C8167B373.

Documents reviewed (accessed *via* MCMS)

- 4. MLA_2020_00506-PC1084_RHD-ZZ-XX-RP-Z-1100_EIA Report_main body-8 BT.pdf
- 5. MLA 2020 00506-PC1084-RHD-ZZ-XX-RP-Z-1100_EIA Report_Appendices_Part1-3.pdf
- 6. MLA_2020_00506-PC1084-RHD-ZZ-XX-RP-Z-1100_EIA Report_Appendices_Part2-4.pdf

Description of the proposed works

- 7. South Tees Development Corporation (STDC) is proposing to construct a new quay at South Bank in the Tees estuary (referred to hereafter as the proposed scheme). The proposed scheme ('project' hereafter) is required to support STDC's landside proposals for general industry and storage or distribution uses within part of the South Industrial Zone. It is envisaged that the new quay would be utilised predominantly by the renewable energy industry, as well as supporting more general industrial and storage/distribution activities.
- 8. In summary, the proposed scheme comprises demolition, capital dredging, offshore disposal of dredged material, placement of rock in the berth pocket and construction and operation of a new quay (to be set back into the riverbank).
- 9. The above cited reports represent the Environmental Impact Assessment (EIA) and associated appendices in support of a marine licence application to the Marine Management Organisation (MMO) and a planning application to Redcar and Cleveland Borough Council (RCBC).
- 10. This advice minute contains my benthic ecology advice regarding the project based on the information provided. I will provide my assessment as responses to the MMO-supplied questions specifically formulated for the request.





11. To note, this constitutes one of two advice requests for this project. The other request (MLA/2020/00507) pertains to Phase II of the project but, as the documentation for both phases are the same and the assessment of impacts for the two phases are not separated within the EIA, the responses given to the questions in the advice request to MLA/2020/00507 are identical to those presented herein.

Responses to MMO-specific questions

Question 1: To the best of your knowledge is the description of the environment and potential impacts accurate?

Minor comments

- 12. Yes, the environment in the vicinity of the project is adequately described in terms of benthic ecology features. The data reviewed from previous studies and from desk-based sources provide some understanding of the features in this region, although it is acknowledged that these data do not represent the exact area potentially being impacted by the present project.
- 13. In view of this limitation, a dedicated survey has been conducted during 2020, the data from which were not available at the time of writing the EIA report. It is presently assumed that the benthic communities within the proposed project area are comparable to those previously observed in the nearby sampling stations of the NGCT (Northern Gateway Container Terminal) survey in 2019. While this is fine in principle, I assume there is the capacity for the understanding of the baseline, and the associated assessment of impacts, to be revised within the EIA process should the new data not support those of previous findings. Can the applicant please confirm this is the case?

Question 2: Has the appropriate evidence base been used? Is the evidence complete for its intended use i.e. is there sufficient information to allow a decision on the application to be made?

Observations made

14. Yes, see response to Question 1.

Question 3: Do you agree with the conclusions reached? Observations made

15. Yes, I agree with the description of the baseline environment based on the previously acquired data.

Question 4: Are the proposed mitigation and monitoring measures sufficient? Observations made

16. A number of mitigation measures are proposed, and these are all sensible and should minimise impacts to benthic ecology features.

Question 5: Are there any minor technical or presentational comments that affect the overall confidence in the conclusions?

Observations made

17. No.

Question 6: Is the project description clearly presented and consistent throughout the ES? Observations made

18. Yes, the EIA report clearly explains, with the aid of clear figures and diagrams, the construction of the project and its potential implications for the marine ecological features.

Question 7: Is there an adequate description of the baseline physical and biological





environment?

Observations made

19. Yes, although see response to Question 1.

Question 8: Is the EIA methodology and assessment presented clearly and fully justified? Observations made

20. Yes, the EIA clearly sets out the impact assessment methodology: it uses a well-established method which I support.

Question 9: Is there an adequate description of the potential project impacts and effects on the physical and biological environment?

Observations made

21. Yes, the potential impacts and their implications for the various marine ecology features are defendable, although there are two specific items below that I will raise.

Minor comments

- 22. The first comment I raise regarding the assessment of impact significance regards to the loss of intertidal habitat due to the dredge/excavation works (Section 9.1.5.2). Notwithstanding that risk assessments are always a relatively subjective, but given that mudflats are a UK Priority Habitat, I would assume they would be regarded as 'high' sensitivity. Given this, the risk assessment process would conclude an overall significance would be 'moderate adverse'. I would suggest that the applicant provides a greater rationale to support the 'medium' sensitivity given. I am not sure as to why the lack of confidence in the MAGIC mapping of this habitat is given to downweigh the potential sensitivity of this habitat. Perhaps the presence (and quality) of this habitat can be confirmed following the processing of the 2020 dedicated survey data?
- 23. The second guery I have regarding the assessment of significance of impact relates to the change in flow regime affecting marine communities (Section 9.6.2). It is stated that there is predicted to be an increase in the tidal prism of 0.8% and that this is considered to be of low magnitude. However, while a prism change of 0.8% may seemingly appear small, there is no evidence to indicate what effect this 0.8% change will have on the extent of intertidal vs subtidal area. Is there any evidence of this in the EIA report to quantify this which may therefore be used to support the conclusion of low magnitude?

Question 10: Is there an adequate description of the potential cumulative and inter-related impacts and effects on the physical and biological environment? **Observations made**

24. Yes, these are assessed in Chapter 27.

Question 11: Is there an adequate description of the potential transboundary impacts and effects on the physical and biological environment? **Observations made**

25. No, transboundary impacts are not addressed within the EIA although I would consider that they are unlikely to be an issue for this project.

Question 12: Are measures to avoid, reduce or remedy significant adverse effects clearly presented and appropriately justified?

Minor comments

26. It is concluded that the potential impact on the subtidal habitat and benthic community as a result of habitat loss caused by dredging would be of moderate adverse significance (Section 9.1.5.2). However, I do not see any reference to whether there is any mitigation planned for this impact, can the applicant please clarify this (perhaps it is stated elsewhere within the EIA report)?





Question 13: Are monitoring proposals and recommendations clearly presented and appropriately justified?

Observations made

27. N/A – no monitoring for benthic ecology receptors is required.

Question 14: In collecting data have details of any quality standards or assurance methods been given?

Observations made

28. The current data used to provide the baseline description of the marine ecology features in the region were based on previous surveys and thus I am not in a position to review whether quality standards or assurance methods were adopted. A dedicated survey for this project has been conducted during 2020 although the data are not yet ready for review within the EIA. The methods used for this survey are not, however, provided as part of this EIA report.

Question 15: Please assess the methodology used to prepare and gather evidence. Have they used standard practices?

Observations made

29. See response to Question 14.

Question 16: Is the timeliness of the data appropriate for the intended use? Observations made

30. Yes, the data upon which the baseline has been derived are principally those from the NGCT survey of 2019. I assume the data from the dedicated survey conducted in 2020 will later be used within the EIA, though this should be clarified by the applicant as per my response to question 1. Both datasets are acceptable with respect to their timeliness and their suitability in terms of spatial representation.

Question 17: Is the evidence that has been supplied appropriate (i.e. proportionate and targeted) for its intended use?

Observations made

31. Yes, see response to previous questions.

Question 18: Is the evidence consistent with that submitted for operations of a similar nature?

Observations made

32. Yes.

Question 19: For evidence that relies on modelled data has an unbiased statistical accuracy assessment been carried out?

Observations made

33. N/A.

Dr. Stefan Bolam Senior Marine Benthic Ecology Advisor

Quality Check	Date
Joe Perry	22/01/2021



