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Your ref: File 24
Our ref: DC9172

By email only

Able Marine Energy Park

MMO comments on additional environmental information submitted by Able UK Ltd on 12 October 2012

Dear Mr Cram,

Please find below the MMO's comments on the additional environmental information submitted by Able UK Ltd to the Planning Inspectorate on Friday 12 October 2012. The MMO received a link to this information on Monday 15 October 2012. Comments are provided on each separate document in turn. Please note the MMO has not commented on the following reports:

- EX 11.26: Water Vole Mitigation
- EX 11.27: Breeding Bird Mitigation
- EX 11.32: Environmental Monitoring and Management Plan: 2. Terrestrial Habitat – Killingholme (Draft)
- EX 11.33: In-combination Effects on Curlew
- EX 35.14: Cherry Cobb Sands Compensation Site: Bird Survey Results August 2010 to April 2011
- EX 36.4: Embankment Inspection & Maintenance Plan

It should be noted that in addition to the comments provided below, the MMO reserves the right to amend, update, remove or make further comments once we have been able to complete a thorough review of the documentation provided.

Applicants Comments on Answers to 2nd Set of Examiners Questions

Disposal of erodible materials to HU080 from capital and maintenance dredging

The MMO does not have any ongoing concerns in relation to impacts associated with maintenance dredging and disposal either alone or in combination. The amounts of material Able propose to dispose of to HU080 are no more than has previously been licensed to be disposed of to this site.

The MMO has also reviewed the submissions made by Peter Whitehead on behalf of ABP. Based upon advice from Cefas, the MMO is content that erodible material from capital and maintenance dredging activities can be disposed of to HU080 (**Note:** this does not apply to the disposal of gravel at HU080, where further assessment is necessary - see comments below).

EX 7.8: Able Marine Energy Park Dredging Strategy (Superseding Annex 7.6)

General comment

Where volumes for dredged material are provided (m3), wet tonnages should also be provided for clarity as marine licences are issued in relation to wet tonnes. Conversion factors should be provided where appropriate.

Section 3 and Figure A7.2

These sections and figure should be updated reflect the agreed dredge area names and tonnages as adopted in the draft DCO/DML (based upon Table 12.2 from the SOCG dated 27 July 2012). For example, please clarify whether 'Reclamation area (including anchor trench)' is the same as the 'Quay Site'?

Table 3.1

This table should be updated reflect the agreed dredge area names and tonnages as adopted in the draft DCO/DML (based upon Table 12.2 from the SOCG dated 27 July 2012). Please also convert to tonnages and provide conversion factors where appropriate.

Paragraph 4.1.1 and Figure A7.3

'Expected dredge materials' are stated as being in red on Figure A7.3, however no gravel amounts are coloured red, indicating no gravel material is proposed to be disposed of to sea. This is incorrect and should be clarified.

In addition, Cefas PSA analysis results show samples largely comprising gravel at sample locations F surface, Q surface (berthing pocket) and H surface (anchor trench). This is not reflected in fig A7.3 nor in Table 3.1. There should not be any inconsistencies in this report and the figures provided should reflect the text. This requires updating.

Paragraph 6.1.1

The report states that all material from AMEP will be disposed of to offshore disposal sites within the Humber. This is incorrect as part of the material is now going to be re-used within the quay construction. The text should therefore be updated to reflect this agreed change to the project.

Paragraph 6.3.3

With regard to the three 'window' disposal sites (HU081, HU082, HU083) the report states that *"It is therefore proposed and confirmed acceptable by the MMO that all non-erodible material is deposited within these areas."* This is incorrect – the MMO have advised that inerodible deposits from AMEP should be disposed of to HU082 only. The report therefore requires updating to reflect this fact.

Appendix 2 Dredge Methodology

This appendix should be updated to reflect the dredging and disposal practice agreed for AMEP with the MMO. For example, Section 3.2 refers to all three window sites, but only HU082 is available to AMEP for inerodible deposits. The document requires updating accordingly.

EX 8.7A: Modelling of Final Quay Design (Supplemental to Annex 8.1 of the ES) (Superseding Supplementary Environmental Information EX 8.7)

*In combination assessment of the disposal of **inerodible** materials to HU082 from capital dredging*

Report EX8.7A contains satisfactory information in relation to the incombination assessment of the disposal of inerodible materials. The MMO are content that the predicted impacts described are not of concern and AMEP's contribution to the incombination, estuary-wide impacts is small, and impacts on bathymetry at the disposal sites (HU081,82,83) do not appear to pose a risk to the adjacent coastline. However, the MMO has not yet had adequate time to review Report EX8.12A (Water Framework Directive assessment). Once the MMO has reviewed this document, we reserve the right to provide an updated opinion based upon our findings.

EX 8.12A: Water Framework Directive

The MMO has not had sufficient time to review this report for the 9 November; we will however provide any comments we may have in due course.

EX 8.14: Hydraulic & Sediment Regime – Piled Structures

The results presented in this report suggest that the previous modelling work undertaken is still valid. The MMO are satisfied with the conclusions of this report and have no further comments to make.

EX 8.15: Effect of Moored Vessels on Flows

The results presented in this report suggest that the previous assessments of changes to flow conditions arising from the AMEP quay are still valid. The MMO are therefore satisfied with the conclusions made in this report and have no further comments to make.

EX 8.16: Chapter 8 Signposting Document

The MMO have the following comments in relation to report EX8.16:

1. Table 8.1 (page 8-4) outlines the AMEP layouts modelled for various impacts assessments. The final layout has been modelled for all impacts assessments except for: plume dispersal from dredge disposal site; estuary geomorphology; and plume dispersal from construction activities at AMEP. The impacts assessed for these three aspects will not be affected by the use of 'Layout 1b' or original layouts in the modelling work because they all address wider changes, unlikely to be affected by minor flow variations associated with different AMEP layouts. The assessments made in the original ES do not, therefore, require updating.

2. Paragraph 8.6.17 (page 8-19) – it is stated that gravel disposal to HU080 will not be out of character as coarse sediment deposits are seen in the sub-tidal Outer Humber Estuary. Whilst the MMO is content with the predicted footprint of the gravel, as previously modelled by Able, the MMO does not agree with this statement.
3. Paragraph 8.6.26 (pages 8-20 to 8-23) - the impacts to tidal levels presented are not of concern, and nor are the hydrodynamic and bed shear stress impacts shown in the updated Figures 8.6b and 8.7b (pages 8-24 and 8-25) and 8.8b, 8.8c, 8.9b and 8.9c (pages 8-27 to 8-29).
4. Paragraph 8.6.35 (page 8-31) - new mitigation for increases in wave height and overtopping risk (in the form of a rubble mound structure) is proposed. No further details of this new structure are given. It is not clear to the MMO that the impacts of this structure have been assessed, and the applicant is asked to demonstrate where in its environmental information this structure has been assessed.
5. The effect of the development on wave heights for a 1:200-year water level/wave height event in 2014 is shown in Figures 8.10 and 8.11 (pages 8-31 and 8-34). Figures 8.10b and c (pages 8-32 and 8-33) and 8.11b and c (pages 8-35 and 8-36) are presented in order that the wave impacts predicted for 2033 can be compared, as requested by the Environment Agency. The applicant is requested to produce figures showing the changes in wave height predicted for 2033 for the same spatial extent as Figures 8.10 and 8.11 in order that the change in impact caused by an extra 19 years of climate change can be gauged.
6. Page 8-40 - the MMO accepts the upper estimates for the maintenance dredging requirements of the berth pockets, turning area and approach channel presented in report EX8.6 (Review of maintenance dredging requirements) and referenced in EX8.16.
7. Paragraph 8.6.51 (page 8-43) - the MMO agrees with the recommendation that intertidal levels between HIT and AMEP are monitored after AMEP's construction.
8. Table 8.3b (page 8-46) - this table contains a minor error in the total volume of material to be disposed of at HU083. As this disposal has been an important issue in the application this error should be corrected to prevent future misunderstandings. In addition, there is a minor error in the figures for IOTA – these should read **279,700** tonnes in each of HU081 and HU083 (as provided to the Applicant by the MMO on 27th September 2012), whereas presently the table states 279,000 tonnes for each area.

EX 10.8: Disposal Site Characterisation and Impact Assessment (Gravel Fraction)

Impacts of gravel disposal to disposal site HU080

The MMO has reviewed report EX10.8, the most recent assessment from the Applicant relating to the proposed disposal of gravel to HU080. The MMO is still content with the predicted footprint of the gravel, as previously indicated to all parties.

The desk study in report EX10.8 to determine sediment and benthic communities is based on survey data, most recently from 2007 (e.g. the IOTA ES), and not recent directed survey effort. This data referenced has shown high levels of temporal variability, therefore any conclusions within the report must be treated with caution with regards to how well the site characterisation reflects the current habitats and biotopes present along with their spatial extent. To effectively assess the risks to these designated habitats, their current location and spatial extent must be accurately described prior to any disposal activity taking place.

At present the report does not provide a satisfactory indication of sediment type within both the disposal site and the predicted gravel footprint area, nor is there an assessment of the potential change in substrate type. As benthic classification relies heavily upon the substrate type present, the classification undertaken in the report may therefore not be accurate, as substrate data are lacking. The potential recovery of communities post-disposal is also not possible to determine at this time.

It is recommended that the Applicant undertake additional PSA/benthic sampling to assess the substrate types present. This would then allow for pre- and post-disposal impacts to be properly assessed. However it is recognised that this will not be possible prior to the close of the examination period and may therefore be necessary to insert an additional condition within the Schedule 8 of the DCO (the deemed marine licence).

It is therefore the MMO's current position that the gravel fraction should not be disposed of to HU080, and alternative solutions should be sought, for example reused in the construction phase, screened out aboard the dredger (as happens in the aggregates industry), landfill, or disposal of to a more suitable offshore disposal site (which would require further assessment to be undertaken). Should further evidence be provided by Able that allows the potential impacts of placement of gravel in HU080 to be properly assessed, the MMO would be happy to review this data.

EX 10.9: Environmental Management and Monitoring Plan: 1. Marine Works (Draft)

The MMO have reviewed the draft marine EMMP but we are aware that an updated draft will be issued by the Applicant on 12 November 2012. Therefore the comments below may change in relation to the updated draft EMMP. We are also aware of Natural England recent comments to you on the content and structure of the EMMP documents, and trust that our comments assist this process.

General comments

The marine EMMP should clearly state the proposed construction start dates for each element of the project for which monitoring must be in place, the frequency of monitoring required, duration, number of surveys and sites, and the expected completion date.

The marine EMMP should also contain clear maps or charts showing the locations where construction activities are to be undertaken, and also monitoring sites/transects etc.

Section 2

As previously discussed, it is not necessary to reiterate impact assessment as reported in the ES and supplementary environmental information within the marine EMMP. This

section should be reduced in size or deleted. Requirements/conditions here should be moved to a more appropriate section (e.g. piling conditions).

Section 3

The MMO agree that a baseline data section is useful, however it may be sensible to remove birds from the marine EMMP.

Reference to specific surveys within the baseline data relating to benthic invertebrates, fish, intertidal habitats and water quality could perhaps be tabulated to cut down on wording. Data should be presented numerically where possible.

Section 4

Some of the information in this section may be more pertinent within the compensation EMMP, as it specifically mentions the designated sites.

The sections relating to impact assessment can be removed.

Quality objectives: these should relate to the predictions made in the impact assessment. Undertaken in the ES (where still valid) and supplementary information.

Section 5

The MMO welcomes the proposed formation of an Environment Steering Committee and would wish to be represented upon such a group. The MMO believes that there should be an independent body to chair the committee.

The MMO welcomes the proposed appointment of an Environmental Clerk of Works (ECoW) for the construction phase (Paragraph 153).

Section 6

The marine EMMP should be a central reference document to allow for the delivery and implementation of the conditions/requirements of the DCO and DML. Section 6 of the marine EMMP should therefore be updated to clearly outline how the proposed monitoring requirements relate to achieving the conditions/requirements contained within the DCO/DML.

This section should also outline the triggers that would initiate remedial actions to be taken where necessary.

The marine EMMP should extract all of the requirements from the DCO and DML and clearly outline the monitoring objectives related to each condition, how these will be achieved, and timescales for their implementation.

Section 7

The marine EMMP should clearly state the frequency of monitoring, and of the production of monitoring reports (annual, biannual etc), and how these will be distributed to members of the Environment Steering Committee and verified.

EX 28.3: Compensation Proposals

The MMO has not had sufficient time to review this report for the 9 November deadline; we will however provide any comments we may have in due course and at the Specific Issue Hearings to be held on 12 and 13 November 2012.

EX 31.5A: Factual Report on Geo-Environmental Ground Investigation, Cherry Cobb Sands (Final)

As indicated in our response to the Examining Authority dated 12 October 2012, the MMO is content that any Requirements regarding Contaminated Land matters, as provided by the Environment Agency (see Schedule 11 of the draft DCO), will be sufficient to address any concerns in relation to contamination currently present on site, and its treatment or removal prior to breaching and hence the area becoming part of the tidal marine environment.

EX 44.2: Cumulative and In combination update (Addendum to EX44.1)

The MMO has not had sufficient time to review this report for the 9 November deadline; we will however provide any comments we may have in due course.

Should you have any questions on the above, please do not hesitate to contact me directly.

Yours sincerely,

Gregor McNiven
Marine Management Organisation

Cc: Planning Inspectorate