

WRITTEN SUMMARY OF THE ORAL CASE PUT BY THE MARINE MANAGEMENT ORGANISATION AT THE ISSUE SPECIFIC HEARING ON MARINE MATTERS

- 1.1 This is the written summary of the oral case that was put by the Marine Management Organisation (“MMO”) at the issue specific hearing into marine matters for the proposed Able Marine Energy Park (“AMEP”) which took place on 13 September 2012.
- 1.2 Only those issues or topics on which the MMO made submissions at the hearing are included below. It should be noted that the summary of the oral case put by the MMO at the issue specific hearings into the compensation site, main site and associated HRA matters on 11 and 12 September 2012 is contained in a separate document.

2. Examining Authority’s Queries

(1) The E.ON and Centrica Intakes and Outfalls

- 2.1 In light of the fact that the works undertaken at the AMEP site are likely to result in the E.ON and Centrica Outfalls silting up, a mechanism needs to be agreed as to how to address that siltation. Initially two options were presented by the Applicant:
 - (i) maintenance dredging the outfalls;
 - (ii) moving one or both of the outfalls.
- 2.2 Throughout all stages of this application the MMO has made it clear that the Applicant should decide which option it wishes to pursue as it will require inclusion in the Deemed Marine Licence (“DML”) at Schedule 8 of the proposed Development Consent Order (“DCO”) and the MMO is of the opinion that it is not appropriate to licence both options simultaneously.

- 2.3 Despite the MMO stating that it requires the Applicant to select which option to pursue, in the Applicant's response to the Examining Authority's ("ExA") second round of written questions, the Applicant suggested a third possible option, namely the placing of a sleeve over the outfalls (see para. 8.5 of that response). The MMO notes that this third option has not yet been assessed by the Applicant and that the Applicant acknowledged at the hearing that this would require a separate consent were it pursued.
- 2.4 The MMO understands that the Applicant's preference is to have both the first two options consented in the DML and the MMO is currently considering its position on this matter and investigating the implications of licensing both the maintenance dredging and relocation of the outfalls. However, it is stressed that this is not the MMO's preferred option.
- 2.5 At the hearing the MMO also noted that the increase in suspended material at the intake valves of the E.ON and Centrica outfalls was of concern and that the Applicant has proposed real-time monitoring of the suspended sediment concentration near the intakes. The MMO highlighted that a monitoring and mitigation strategy to assess, and where required mitigate any changes must be agreed in writing with the MMO prior to any works commencing and that a condition to this effect will need to be included in the DML. The development of such a strategy will require consultation with E.ON and Centrica to ensure suitable management trigger thresholds are development. No details concerning that monitoring and mitigation strategy have been received from the Applicant to date.
- 2.6 Finally, the MMO welcomes the explanation from the Applicant concerning the discrepancy between the figures for the quantity of material to be dredged at the outfalls in Table 3 of Report EX8.6 and those agreed in the Statement of Common Ground. The MMO can confirm that the explanation given, that the higher figure in EX8.6 is the assessment for the dredging required for the quay as whole as opposed to the figures for the outfalls specifically, has addressed the MMO's concerns on this point.

(2) The South Killinghome Mooring Dolphins

2.7 At the hearing the ExA queried the likelihood of erosion and sedimentation by the mooring dolphins at South Killinghome. The Applicant acknowledged that if sedimentation builds up significantly at the inner dolphin it would affect the activities taking place there and confirmed that it would seek to work with the jetty operator to secure walkways as an alternative. The MMO requested that any information regarding those proposals was provided to it so that it could ensure that there were no works involved which would require to be licensed in the DML.

(3) Report EX8.6 – Sediment at the Berthing Pockets

2.8 At the hearing the ExA asked the MMO whether it agreed with the reduced levels of sedimentation at the berthing pockets suggested by the Applicant in Table 3 on page 2 of Report EX8.6. Mr Dean Foden from the Centre for Environment, Fisheries and Aquaculture Science (“CEFAS”), the MMO’s scientific advisor, confirmed that the assertions looked reasonable, but that the MMO had asked the Applicant to clarify whether it had included the drag effects around Immingham and Humber Sea Terminal (now known as CRO) in its modelling.

2.9 Dr Dearing, the Applicant’s consultant, clarified that whilst the initial JBA modelling had not included an assessment of those effects in its modelling, HR Wallingford in the latest modelling had factored it into the modelling. The MMO confirmed that, in light of the explanation provided by Dr Dearing, it no longer had a concern on this matter and did not feel that additional modelling was required.

(4) Modelling of Vessel Use

2.10 The representative from CRO questioned whether an adequate assessment of the affect of vessels using the facility had been done in light of the list of vessels expected to use the facility which had been provided to it by the Applicant and

the potential impacts upon flows and sedimentation which the vessels could have. The MMO noted that it was not aware any vessel details had been provided so had not raised this matter as concern. However, given the concern raised by CRO this was a matter that would be of concern to the MMO. The MMO has subsequently had sight of the list of vessels provided by the Applicant to CRO.

- 2.11 It is understood that, at the hearing, the ExA asked the Applicant to undertake the necessary modelling, which the Applicant agreed to do. The MMO would request sight of the results of that modelling when they become available.

Topics 1 and 3 – hydrodynamic, the sedimentary regime, dredging and disposal issues

(1) Disposal at Site HU080

- 2.12 As a general observation, the MMO noted that HU080 has taken large quantities of material in the past and, given the dispersive nature of the Humber, the MMO considers that the disposal site has capacity to take the material as currently described in the DCO Application. However, the site will need to be monitored to ensure the material is dispersing as predicted and the MMO will require this either to be a condition on the deemed marine licence, included as part of the dredge and disposal strategy (currently at condition 32 of the DML) or included as part of the Marine Environmental Management and Monitoring Plan (currently at condition 13 of the DML). The Applicant will be required to agree the scope of that monitoring with the MMO prior to commencement of the works.
- 2.13 The MMO understands the Applicant is currently considering the wording of a suitable condition and that the Applicant proposes to employ a survey company to undertake (possibly fortnightly) bathymetric surveys at the Sunk Dredged Channel. The MMO will provide guidance to the Applicant on this matter during the ongoing drafting of the DCO and DML.
- 2.14 The MMO noted that, in its representations submitted on 3 August 2012, ABP Commercial had raised a concern that by taking material from the middle of the Humber estuary to the lower estuary could affect the morphology of the estuary

and thereby have a knock on effect on protected sites. The MMO confirmed that it understood that the Applicant had assessed morphology (see report EX 8.7) and that the MMO was of the view that any affects would be localised and would not result in a knock-on effect on wider sites.

2.15 In relation to a concern raised by the Harbour Master that deposition of capital and maintenance dredged material at HU080 would increase the amount that the Harbour Master would be required to dredge the Sunk Dredged Channel, the MMO noted that the Applicant had not modelled the long term affects on the Sunk Dredged Channel, as Dr Dearing confirmed at the hearing.

2.16 However, Miss Sarah Pacitto from CEFAS explained that HU080 had historically taken large quantities of material in the quantities that the Applicant was proposing and that no problems or data regarding overloading at the site had been reported to the MMO or CEFAS in the past. In particular, the MMO had not received information regarding the peaks in sedimentation rates described by ABP's witness, Peter Whitehead. If, however, there was information regarding historical problems with disposal at the site, that information should be provided to the MMO.

2.17 Further, to address the Harbour Master's concern of what would occur if there did turn out to a problem in practice, the MMO noted that it was regular practice to impose a condition on marine licences that required monitoring reports to be submitted and that if adverse affects are determined to be occurring, disposal must cease immediately.

(2) Disposal of Gravel to HU080

2.18 The MMO explained that, whilst it was generally content with the disposal of erodible materials to HU080, there was an outstanding issue regarding potential disposal of gravel to that site.

2.19 Gravel is not permitted to be disposed of to HU080 as this disposal site is characterised for erodible material. However, the Applicant seeks to rely on the Immingham Oil Terminal ("IOT") Environmental Statement as an example of

where gravel had been permitted to be disposed of to this site previously. The MMO is of the view that this does not provide a precedent for disposal of gravel to the site given the different circumstances between the two cases.

- 2.20 Of the 170,000m³ of material allowed to be disposed from IOT, the minimum samples contained material entirely below the 1mm fraction and therefore did not include gravel. Data from IOT demonstrated that, in the worst case, some particles above the 2mm fraction were present, but that that worst case represented, at the most, 20% of the material i.e. 34,000m³. That is considerably less than the 130,000m³ material the Applicant is proposing to dispose of to HU080, all of which is 2mm-10mm.
- 2.21 Consequently, at present, the Applicant is seeking to dispose of a far greater amount of gravel than the site has received previously and the impact must therefore be assessed as gravel material will not disperse, but will remain local to the disposal site. The MMO had requested modelling of the movement and fate of the gravel to determine whether the disposal would have an impact on hydrodynamic processes and/or an affect on other operators. A technical note on this was produced by the Applicant's consultants JBA on 5 September 2012, and the MMO is currently considering the information contained in that note.
- 2.22 Thus far, the MMO is of the view that the modelling demonstrates that the disposal will not have an affect on the flow regime of the estuary. However, the MMO is concerned that disposal of gravel to HU080 will change the habitat type of the benthic environment. It is currently not known what habitat type exists at this site, although ABP's consultant indicated that he had information on this matter which he agreed to supply to CEFAS – the MMO/CEFAS is awaiting his response. The Applicant is therefore requested to assess the benthic effects of the disposal proposed. It should also be noted that the Environment Agency expressed the view that any change in the benthic environment would require an assessment under the Water Framework Directive.
- 2.23 The MMO welcomes the statement by the Applicant at the hearing that it will assess the impact of the intended disposal on the habitat at the site and looks forward to seeing those results in due course. The MMO will continue to engage

with the Applicant on this issue and to investigate other options, in the form of retaining some of the coarser gravel fraction within the quay construction or identifying a different disposal site, should this disposal prove unacceptable

(3) In-combination Assessment of Disposal at Site HU082

2.24 In relation to the in-combination disposal to site HU082 the MMO referred the ExA to Annex 1 of the Environment Agency's response to the ExA's second written questions which was submitted on 7 September 2012.

2.25 When the Applicant originally carried out its assessment of disposal to site HU082 it had assumed that only AMEP would be disposing to that site and therefore assessed full disposal, of 954,350m³ of material to site HU082. It is not correct that only AMEP will be disposing to that site and other operators have consents to dispose material there.

2.26 However, the Applicant now proposes to dispose of approximately 40% of the material (454,350m³) to the site. The tables produced at Annex 1 to the Environment Agency's response demonstrate that, when taking into account the volume of material now proposed to be disposed of at HU082 by the Applicant along with the volumes of material which is currently consented to be deposited by other operators, that total quantity is still below the 954,350m³ originally assessed by the Applicant. The Applicant has therefore assessed an appropriate quantity of material to be disposed of at site HU082.

2.27 However, whilst the quantity of material that has been assessed may be adequate, the MMO is concerned that a proper in-combination assessment has not been undertaken. There are there disposal sites which are close together – HU081, HU082 and HU083. The Applicant has modelled the hydrodynamic effects that currently exist and those which are likely to result from disposal of 954,350m³ of material at site HU082. However, that assessment does not encompass the affect that will result from disposal of that quantity of material at HU082 at the same time as other licensee are depositing material at sites HU081 and HU083 nearby.

- 2.28 The Applicant explained that part of the reason why such an assessment was not undertaken was because advice had been received from the MMO that there were existing consents to deposit at sites HU081 and HU082, but that the Applicant had only recently been informed that deposition would also be taking place at HU083.
- 2.29 The MMO apologised that the Applicant had not been given the necessary information concerning site HU083 and agreed to engage with the Applicant in discussions over this issue to determine whether the MMO's concerns could be overcome on the basis of the assessments that had been undertaken. The MMO also noted that whilst the updated position did mean that less material was being disposed of to site HU082 than previously advised, this did not overcome the MMO's concerns regarding the lack of an assessment of deposition to all three sites.
- 2.30 An updated position outlining the way forward agreed between the MMO/CEFAS and the Applicant will be provided to the ExA, Natural England and the Environment Agency.

(4) Location of the South Bank Channel

- 2.31 The MMO noted that it had requested clarification from the Applicant as to the correct location of the South Bank Channel. The co-ordinates which had previously been provided to the MMO for this channel were incorrect as they located the channel on land, away from the quay. The Applicant confirmed that the incorrect co-ordinates had been provided and that it would provide updated co-ordinates in due course.
- 2.32 The MMO looks forward to receiving those co-ordinates so that it can check that information against what has been assessed by the Applicant. That will be important to ensure, first, whether any contaminants were present and secondly, whether the sampling strategy was adequate to inform a decision on disposal options given that 1000 m³ of material is proposed to be dredged to initiate the channel and complete re-dredging of the channel will be required every year.

The volume of that dredge material will also need to be confirmed so that it can be included in the DML.

Topic 4 – navigation

2.33 In relation to the impacts of AMEP on navigation, the MMO repeated the comments it made at paras. 7.51-53 of its Relevant Representations and at page 31 of Annex 1 to its response to the ExA's second written questions, that once a final construction plan has been developed and an accurate vessel movement plan is available a more detailed navigation risk assessment of the construction phase of the project will be needed. This should be consulted upon with the relevant parties and form a condition of the DML.