

INFRASTRUCTURE PLANNING

**THE INFRASTRUCTURE PLANNING
(EXAMINATIONS PROCEDURE) RULES 2010**

THE ABLE MARINE ENERGY PARK DEVELOPMENT CONSENT ORDER

TR030001

**Responses of the Harbour Master, Humber
to ExA's second round of written questions**

(Rule 8 letter 31 May 2012 Annex D1 and ExA letter 17 August 2012 Annex A)

Unique Reference Number	URN10015524
Rule No.	8 (1)(b)
Document Ref.	ExAQ02
Author	Harbour Master, Humber
Date	04 September 2012
Date of revision & version number	07 September 2012 (Revision 1.1)

Winckworth Sherwood LLP
Minerva House
5 Montague Close
London
SE1 9BB

PART 1 - RESPONSE TO EXAMINING AUTHORITY'S QUESTIONS ADDRESSED PRIMARILY TO HARBOUR MASTER, HUMBER

Q. 45 - Is the Harbour Master Humber now satisfied that enough simulations have been carried out to demonstrate that the AMEP development would pose no undue problems for the berthing and un-berthing of vessels at the C.RO facility or at the AMEP development itself?

1. The Harbour Master, Humber is satisfied that there have been sufficient simulations. They demonstrate that the AMEP development should not pose undue problems of the sort mentioned so long as – and only so long as - there is no interference with the Harbour Master Humber's powers to control vessel movements within his area of jurisdiction; in particular, so as to prevent interference with vessels manoeuvring to and from C.RO's downstream berths by traffic (such as dredging craft) connected with the construction of the AMEP development or, during operations, by ships going to and from the Able quay.
2. The proposed protective provisions in Part 2 of Schedule 9 to the draft Development Consent Order (version 03.08.12) include (i) protection for the primacy of the statutory functions of the Harbour Master, Humber and (ii) provision for the approval by the Harbour Master, Humber of a written statement of proposed safe operating procedures for access to and egress from the Able harbour, with which Able must comply. These provisions will ensure that the Harbour Master, Humber can direct vessel movements so as to prevent any undue problems for either C.RO or the AMEP. This is subject to the protective provisions being amended (as will be proposed in the Harbour Master Humber's comments on the revised draft DCO) to require his approval of the vessel movement management plan to be agreed by the holder of the deemed marine licence with the MMO under paragraph 14 of Schedule 8 to the DCO.

Q. 46 – Do the modelling reports given in the Supplementary Environmental Information (SEI) EX 8.5, EX 8.7 and EX 8.8 allay any fears as to the sedimentation and flow impacts?

3. The Harbour Master, Humber has reviewed the SEI. He is generally satisfied with its content and conclusions. However, there are still some matters ailing relating to sedimentation and flow impacts that he wishes to see addressed. These matters are dealt with below in response to questions 51 and 52 (addressed to the Applicant) and, in relation to the Sunk Dredged Channel, in the Harbour Master, Humber's response to question 47.
4. The original ES states that, in places within the 61.5 metre wide berthing pocket, Able intends to dredge down to hard material to a maximum of -14.5m and will then backfill to -11.0m using rock dressed with gravel so that jack-up rigs¹ have a "hard-standing" on which to jack-up. The Harbour Master, Humber is unsure whether the smaller gauge "dressing" material of this description will necessarily stay in place within the berth pocket and the SEI does not have any information in this regard.

¹ A "jack-up rig" is a type of mobile platform that consists of a buoyant hull fitted with a number of movable legs. The buoyant hull enables transportation of the unit and all attached machinery to a particular location, at which point the hull is raised to the required elevation above the sea surface on its legs, supported by the sea bed.

Any migration of backfill can be expected to cause siltation. Able has indicated to the Harbour Master, Humber that, as an addition to the SEI, it will commission an engineering report to verify the requisite material size to prevent dispersal of the dressing material from the berth pocket. The Harbour Master, Humber seeks an assurance from Able that it will do so.

5. The Harbour Master notes that the MMO's request in paragraphs 7.30 and 7.31 of its relevant representation that it may require Able to carry out certain further studies². The fears of the Harbour Master, Humber regarding sedimentation and flow are largely allayed by the EX 8.5, EX 8.7 and EX 8.8. However, that is subject to the reservations mentioned above, In the event of any further studies or assessments or other issues raised by the MMO the Harbour Master Humber reserves the right to make further representations on this subject.

Q. 47 – Does the Harbour Master agree with the MMO and their reasoning that erodible arisings should be deposited in HU080 and non-erodible arisings should be deposited in HU082? If not, why not?

6. Generally yes, although the Harbour Master, Humber notes that the MMO made it clear in its written representation that it would need to review this position once it had an opportunity to consider the SEI. The Harbour Master, Humber concurs with the MMO's view that HU080 will need to be monitored to ensure that the deposited material is dispersing as predicted. In the event that dispersal is not taking place, the provisions of what is now paragraph 18 of Part 2 of Schedule 9 (3 August 2012 draft), requiring remedial action in the event of sedimentation or scour, will be essential protection for the regime of the river.
7. The Harbour Master, Humber does have concerns that the deposition of arisings from maintenance dredging into HU080 would lead to increased sediment supply in the area of Sunk Dredged Channel, which would in turn create the potential to cause additional sedimentation into that navigation channel. When considered in conjunction with the pre-existing cyclical peaks of siltation in Sunk Dredged Channel, this could result in a potential inability of the Harbour Master Humber to maintain the advertised minimum depth in the Sunk Dredged Channel by dredging. This is all the more reason why both HU080 and the actual volume of arisings to be deposited there should be kept under continuous review with reports being made to MMO and the Harbour Master Humber. This process should include a regular programme of hydrographic survey of the deposit. So far as concerns his functions, the object will be to ensure that the potential for overload is identified well in advance, with provision for—
 - (a) identifying the limit beyond which the Harbour Master Humber's operations will be compromised; and

² Para. 7.30 "However, the modelling has not been undertaken on the final proposed scheme for all component processes. This includes the final quay design and the full extent of dredge and disposal activities (see paragraphs 7.4 to 7.28 for discussion on dredge and disposal activities). The impact of these changes on the interpretation of the modelling needs explanation. The Applicant must be able to demonstrate that the results of the modelling as presented adequately assess the impact of the Project as applied for. The MMO requests that the Applicant clearly demonstrate that the modelling results which have been presented are still relevant in relation to the revised project. Otherwise the Applicant may be required to undertake additional work to be able to demonstrate that an adequate impact assessment of the Project to be consented has been undertaken."

Para. 7.31. "In addition, impacts to Immingham Outer Harbour have not been considered and drag effects of jetties around Immingham and Humber Sea Terminal have not been included in the modelling studies. The MMO considers that the modelling should have included these omissions.

- (b) requiring that when that limit has been reached Able must cease deposits at HU080 until such time as there has been sufficient dispersal to allow them to resume without compromising the Harbour Master Humber's dredging operations.

Provision to this effect should be included in the DCO.

Q. 48 – Is the Harbour Master satisfied with the conclusion reached in EX 8.7 of the Supplementary Environmental Information as regards the Sunk Dredged Channel?

8. The Harbour Master, Humber, is conditionally satisfied with the Ex 8.7 conclusion. the conditions are that Able must adopt a “partial disposal” scenario (see Table 4-2 of EX 8.7) for non-erodible deposits at HU082 with a consequent reduction in overall impact and must comply with MMO requirements to fill the natural bathymetric depressions within the HU082 disposal site.

Q. 49 – Does the Harbour Master agree with the conclusions of EX 8.6 of the Supplementary Environmental Information concerning Maintenance Dredging Requirements?

9. The Harbour Master Humber has been advised by an expert on hydrodynamic modelling that the way the information is presented in EX 8.6 is not transparent and gives rise to questions. It is understood that the original model did not include Immingham Outer Harbour in its baseline whereas the revised model is stated to do so and yet the numbers for predicted deposition at various adjacent berths in Table 1 (without IOH modelled) and Table 8 (with IOH modelled) seem identical. This appears odd and calls into question the methodology and, by extension, the validity of the modelling. Before the Harbour Master, Humber can be satisfied by this supplementary information he needs to have these questions answered by the Applicant.

Q. 50 – In terms of Maintenance Dredging what is the total annual tonnage the Harbour Master is licensed to dredge by the MMO and what Spoil Grounds do the MMO require to be used at the present time?

10. ABP HES currently holds two maintenance dredge disposal licences issued by MMO:

Licence No L/2012/00003/2

This allows for the disposal of up to 2,625,000 wet tonnes (875,000 annually) from the Port of Hull riverside berths and approaches (excluding Albert dock) into the Humber 4B/Hook deposit (HU020) and for 2,625,000 wet tonnes (875,000 annually) into the Humber 4B/Hook extension (HU021); and 5,250,000 wet tonnes (1,750,000 annually) from the Port of Hull (including Albert Dock) into the Humber 4 deposit (HU030).

Licence No L/2011/00196

This allows for the disposal of up to 23,400,000 wet tonnes (7,800,000 annually) from Sunk Dredged Channel into the Humber 1A deposit (HU080); 22,500,000 wet tonnes (7,500,000 annually) from the Port of Immingham riverside berths and approaches into Humber 3A deposit (HU060); and 2,550,000 wet tonnes (850,000 annually) from the Port of Grimsby and approaches into the Humber 2 deposit (HU090).

PART 2 – RESPONSE TO QUESTION ADDRESSED PRIMARILY TO THE APPLICANT

Q. 51 – How does AMEP propose to deal with the predicted build up of silt at the outfall/intakes of Centrica and E.ON in the long term?

Q. 52 – How does AMEP propose to deal with the predicted siltation and erosion at the dolphins south east of the development?

11. The Harbour Master, Humber has a financial interest in river users' facilities being protected from any adverse impacts of the AMEP development, so that continued use of the river for navigation purposes remains unimpeded. For that reason the Harbour Master, Humber considers that Able should be obliged to take appropriate steps to prevent any problems arising from predicted siltation and/or erosion at these locations and to act expeditiously to correct any adverse impacts from the development. The Harbour Master, Humber considers that the Development Consent Order should not be made unless appropriate protective provisions are included, or agreements have been entered into between the applicant and the parties concerned, to deal with these issues.