Annex 14.1

AMEP Risk Assessment
Workshop Minutes

(BMT Isis)
AMEP
Risk Assessment Workshop
Minutes

Reference: E0391/Issue 1
Date: February 2011
1 Purpose

1.1.1 This document serves as a record of the Able Marine Energy Park (AMEP) Risk Assessment Workshop, held on Tuesday 25 January 2011 at the Ashbourne Hotel, North Killingholme.

1.1.2 The workshop was facilitated by BMT Isis Ltd (BMT Isis), who are conducting a navigational risk assessment on behalf of Able UK Ltd (Able).

2 Workshop Attendees

<table>
<thead>
<tr>
<th>Name</th>
<th>Organisation</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phil Cowing</td>
<td>Associated British Ports</td>
<td>Harbour Master</td>
</tr>
<tr>
<td>Phil Pannett</td>
<td>Associated British Ports</td>
<td>Pilot Operations Manager</td>
</tr>
<tr>
<td>Martin Gough</td>
<td>Associated British Ports</td>
<td>Dock Master</td>
</tr>
<tr>
<td>Adrian Gray</td>
<td>The Oil and Pipelines Agency</td>
<td>System Control and Logistics Manager</td>
</tr>
<tr>
<td>Andrew Bridge</td>
<td>The Oil and Pipelines Agency</td>
<td>Partner and Contractor Representative</td>
</tr>
<tr>
<td>Chris Davis</td>
<td>GreyStar</td>
<td>Terminal Manager</td>
</tr>
<tr>
<td>Hugh Gates</td>
<td>Simon Ports</td>
<td>Port Manager</td>
</tr>
<tr>
<td>Colin Harrisson</td>
<td>Able UK</td>
<td>Port Director</td>
</tr>
<tr>
<td>Richard Cram</td>
<td>Able UK</td>
<td>Design Manager</td>
</tr>
<tr>
<td>Chris Bordas</td>
<td>BMT</td>
<td>Consultant</td>
</tr>
<tr>
<td>Lee Rhodes</td>
<td>BMT</td>
<td>Senior Consultant</td>
</tr>
<tr>
<td>Edward Horabin</td>
<td>BMT</td>
<td>Engineer</td>
</tr>
</tbody>
</table>

Table 2.1 - Risk Assessment Workshop Attendees
3 Minutes

Introduction

3.1 An introduction to the AMEP proposed development was given by Richard Cram, including a presentation of the latest site plans and estimates of material quantities and dredging requirements.

Structure of the Workshop

3.2 A preliminary list of hazards had previously been identified as part of a desktop study by BMT Isis. The intention had been to assess the risk of each of these hazards (in addition to any new hazards identified by the workshop attendees). However, following initial consultation with the workshop attendees, it was agreed that the focus would be on identifying key concerns and issues relating to navigational risk. It was agreed that these issues would be factored into the draft hazard log.

Vessel Categories

3.3 It was highlighted that previous navigational risk assessments conducted for ports on the Humber Estuary had classified vessels into several categories, such as oil/gas tankers, bunker barges, small craft etc. It was agreed that a similar approach would be taken for the AMEP navigational risk assessment.

Vessel Striking

3.4 It was agreed that the terminology for a vessel hitting a floating mark should be changed to ‘striking’ as opposed to ‘collision’ (as it was referred in the preliminary hazard list).

Scope of the AMEP Risk Assessment

3.5 It was agreed that the scope of the AMEP risk assessment should be limited to a stretch of the Humber from Immingham Oil Terminal to King George Dock, a distance of approximately 9 miles.

Statutory Harbour Authority’s Risk Assessment

3.6 Associated British Ports Ltd (ABP), as the Statutory Harbour Authority (SHA) for the Humber Estuary, have conducted a whole-Humber risk assessment. It was agreed that the AMEP navigational risk assessment should acknowledge this.

3.7 The ABP risk assessment covers hazards such as vessels grounding although these should still be covered in the AMEP risk assessment, within the geographical boundaries agreed.

3.8 It was agreed that ABP would provide information relating to their risk assessment to BMT Isis.
Humber Serious Incident Emergency Plan

3.9 Workshop attendees stated that they would expect Able to take part in the Humber Serious Incident Emergency Plan.

Leisure Vessels

3.10 It was noted that the risk to leisure vessels is low, since they generally keep to the north of the channel and their manoeuvrability enables them to avoid larger vessels. It was agreed that they would still be included in the risk assessment.

Contact with Structures

3.11 It was agreed that the ‘vessel contact with structures’ hazard should include cooling water outfall pipes in the vicinity of the proposed development.

3.12 It was agreed that the contact with structures hazard should look separately at structures owned by Able and those owned by third parties.

Ship Manoeuvring Simulations

3.13 A brief summary was given of simulations conducted to date. These include vessels up to 130,000 tonnes (larger than are expected to be visiting AMEP when it is operational).

3.14 It was agreed that further simulations would be required when more detailed information on ship types likely to use the proposed development is available.

3.15 It was also agreed that simulation studies must be used to check turning a large vessel in the final swinging area design.

Hazard Log Format

3.16 It was agreed that the hazard log format, as demonstrated in the preliminary hazard list, is appropriate for this risk assessment.

Volume of Traffic

3.17 A risk was identified that the volume (and type) of traffic associated with the proposed development could cause congestion on the estuary. There is a limit to the number of large vessels that can move during a tidal window. It was agreed that Able need to be aware of this and that (as is the situation for other ports) some of their ship movements may be delayed due to this.

Humber Passage Plan

3.18 It was highlighted that if the AMEP will cater for vessels that classify as Humber Passage Plan Vessels (i.e. over 40,000 DWT capacity, or having a draught of 11 m or over, or a gas carrier of over 20,000 cubic metres irrespective of draught) then a full review of the Humber Passage Plan may be required.
3.19 The workshop attendees were informed that the proposed development no longer includes a biomass plant so there will be no requirement for Capesize vessels delivering biomass fuel.

3.20 It was agreed that the movement of large vessels (that are not themselves classed as Humber Passage Plan Vessels) can negatively impact on the intended movements of Humber Passage Plan Vessels.

Fire

3.21 It was agreed that Able would need to agree a contract for a fire tug, such as the one at Immingham Dock that is on permanent standby to respond to incidents.

Mooring Line Failure

3.22 It was agreed that mooring line failure should be considered as a cause for vessel collision.

3.23 A risk reduction measure for this is competent ships’ crews.

Temporary Moorings

3.24 Able’s quay construction plans include the possibility of temporary moorings in the estuary. It was agreed that the temporary moorings should not extend further into the channel than the footprint of an operational vessel berthed alongside the completed quay.

3.25 It was agreed that, upon completion of quay construction, full extraction of temporary mooring dolphins or piling will be required.

Humber Workboats

3.26 It was agreed that BMT Isis should contact Humber Workboats as a stakeholder for the navigational risk assessment.

Navigation Marks

3.27 It was agreed that, based on the current (January 2011) designs for the proposed development, it is unlikely that existing shore marks will be obstructed by AMEP structures.

3.28 It was noted that Trinity House are likely to require the upstream and downstream extremes of the quay to be marked with lights. These marks would need to be maintained for as long as the structure exists, even if it is no longer in use. The upstream extent of the swinging area may also need to be marked.

3.29 It was identified that some floating marks may be obscured by the proposed development. The existing marks may need to be elevated to maintain adequate visibility and it was agreed that Able would be expected to pay for any such modifications.
3.30 The existence of Department for Transport (DfT) guidance on port lighting levels was highlighted.

3.31 The proposed design of the quay may mean some areas are classified as ‘havens’ where further lighting is required.

**Marine Control Centre**

3.32 It was agreed that Able will require a Marine Control Centre, manned by maritime professionals, to manage safe berthing and departure of operational vessels. This is required to prevent a ship arriving off the quay and the terminal being unprepared for its arrival.

3.33 Richard Cram confirmed that Able plan to have a Marine Manager to fulfil this role.

3.34 It was agreed that a single point of contact (Project Manager) would be required during the construction phase to manage and control construction traffic.

### 4 Actions

<table>
<thead>
<tr>
<th>Action On</th>
<th>Action</th>
<th>Completed?</th>
<th>Date Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABP</td>
<td>Provide BMT Isis with information relating to the Humber Estuary risk assessment</td>
<td>Yes</td>
<td>25 January 2011</td>
</tr>
<tr>
<td>BMT Isis</td>
<td>Contact Humber Workboats as a stakeholder for the navigational risk assessment</td>
<td>Yes</td>
<td>7 February 2011</td>
</tr>
</tbody>
</table>

**Table 4.1 - Actions**