Able UK Limited		
Middlesbrough Po Dredge and Dispos		
Waste Framework Assessment		
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CONTROL SHEET

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FAIRHURST

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1.0 Introduction

- 1.1 This Waste Framework Directive Assessment has been prepared by Fairhurst on behalf of Able UK Limited to accompany a Marine License application for a proposed capital dredge and 10 years of maintenance dredging. The dredge will constitute the extension and deepening of an existing berth and approach channel at Middlesbrough Port Quays 1 and 2.
- 1.2 The previous licenced dredge depth within the application site varies. The existing berth for Quays 1 and 2 has previously been dredged to -7.0mCD while the entrance channel has been dredged to -5.7mCD under marine licence L/2013/00155. The proposed extension to the berth and approach channel has not been dredged previously, and so is a capital dredge to deepen the seabed by approximately 3m to match the existing berth at -7.0mCD and to deepen the entrance channel to -6.5mCD.
- 1.3 The proposed extended dredge pocket is to support the continued growth of the capabilities of the site in supporting the activities already catered for by Able UK at Middlesbrough Port, which was acquired by Able UK in the 2000s.
- 1.4 The proposed development is located within the Teesmouth and Cleveland Coast SSSI and SPA, and also overlaps with the lower sensitivity Subtidal Soft Sediment of the River Tees channel, which overlays much of the water body.



2.0 Applying the Waste Hierarchy

- A waste hierarchy is provided by the Department for Environment, Food and Rural Affairs (DEFRA), which states that any waste generated by the proposed marine licence activity must be dealt with in an environmentally friendly way. The order of preference for how waste is dealt with, or the waste hierarchy, is as follows:
 - 1. Prevention this can include not carrying out an activity and/or the refusal of a marine licence;
 - 2. Re-use finding an alternative, beneficial use for waste material;
 - 3. Recycling this can include making high grade products from waste material;
 - 4. Other recovery including treatment to alter the physical nature of the waste material; and
 - 5. Disposal this is the last resort.

Prevention

- 2.2 The proposed works will expand the capacity and capabilities at Middlesbrough Port. The deepened and extended berth and approach channel will enable a wider variety of large vessels to utilise the facilities of Middlesbrough Port Quays 1 and 2, ensuring it remains a competitive location within the existing cluster on the Tees.
- 2.3 Prevention of the waste created through avoiding dredging would preclude Quays 1 and 2 from further developing its capacity, and would reduce the potential for economic growth and further investment and innovation at Middlesbrough Port. This is in addition to the other associated benefits of the proposed development as outlined in the Marine License Supporting Statement (Document no. D/I/D/149058/501). In the case of this development, it is considered that the potential benefits from this development outweigh the considered impacts of waste disposal into the established disposal sites at Tees Bay A and/or Tees Bay C using the approved methods, and as such prevention of waste creation is not a feasible option.

Re-Use

2.4 Re-use of the material recovered from the capital dredge would require significant treatment in order to be safe for other uses, given the established contamination in the Tees, as detailed in the accompanying Water Framework Directive Assessment (WFD) (Document no. D/I/D/149058/502). As such, terrestrial transportation to the



Port Clarence Augean facility would be required, and given the large volume of material which will be recovered, particularly from the capital dredge (44,400m³, plus initial maintenance of 24,600m³), this does not constitute a financially or environmentally sustainable solution.

2.5 The cost and fossil fuel resource requirement for the transportation of the material, in addition to those involved in the treatment of such a large volume of material, are disproportionate in comparison to the limited risks and resources required for disposal at sea. As such, re-use of the material is not feasible.

Recycling or Other Recovery

- 2.6 The Port Clarence Augean hazardous waste disposal site, situated across the Tees from Middlesbrough Port does accept dredge arising for treatment and reuse and/or landfill, and reuse/recycling of certain hazardous materials.
- 2.7 However, as noted above, in order to transport and treat the volume of dredge arisings to the land-based facility adds notable additional cost and resource use as opposed the established appropriate disposal strategy for Tees channel dredge arisings at Tees Bay A and/or C licenced disposal sites.
- 2.8 Overall, the additional resource which would be required in order to transport and treat the volume of waste which will be generated through the capital dredging process at Quays 1 and 2 are disproportionate to those which would be required to undertake the dredging in line with the existing methodology. Therefore, recycling and reuse of the arisings is not appropriate for this project.

Other Recovery

2.9 In terms of other potential means of recovering the material dredged, the only option which would be possible is for the material to be transported and disposed of at a terrestrial landfill site. However, as the sediments in the Tees are contaminated, the material would not be suitable for landfill without prior treatment and stabilisation which, as discussed above, is not a resource-efficient or financially viable alternative to at-sea disposal.

Alternatives



- 2.10 As highlighted throughout the assessment of the Waste Hierarchy in Section 2, there are no efficient or feasible alternatives for the recovery of dredged sediments from Middlesbrough Port being disposed of at the designated at-sea sites Tees Bay A and/or Tees Bay C.
- 2.11 However, to minimise any potential adverse impacts of this method of disposal of the sediments, which are known to be contaminated to a degree (see discussion in D/I/D/149058/501) it is proposed that sampling is to be undertaken every 2 years for the analytes of concern within the sediments, and every 5 for all others.



3.0 Conclusion

3.1 Fairhurst consider that this report constitutes a valid Waste Framework Directive assessment and takes into account all relevant information required in order to assess this proposal. As such, it is considered that this report supports a comprehensive and concise recommendation on the outcome of the Marine Licence application.



