

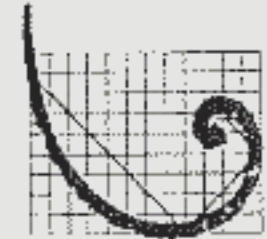
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Our ref: 0000029/July03

Dear Mr Eades

Application for a Government View: Area 457 Liverpool Bay

Thank you for your letters of 30 October and 15 November 2002 in response to our request for comments on the Environmental Statement and for the above production licence application. Apologies for the delay in replying to you, however, it has taken some time to get responses from all consultees and to undertake the additional work necessary to address outstanding concerns.

We are currently preparing the Consultation Report and Supplementary Environmental Statement as required under the licence application interim procedures. Copies of all representations made on the application will be included in the report and submitted to the ODPM. The report and the correspondence will be taken into consideration by the ODPM and DEFRA (their advisors on environmental issues) when determining the application and, if approved, in drawing up the licence conditions.

In advance of issuing the report we would like to address the particular points you raised in your letter. I attach a copy of your letters for reference.

1 Resource Need

Thank you for your detailed comments on the need for aggregates extraction from Area 457. We acknowledge that this is a complex area with different local authority policies and plans and various sources of information on aggregate supply and demand.

It is our understanding from consultations with local authorities, the Crown Estate and others that there is an identified need for construction quality aggregates, contract fill (*ie* poorer quality aggregate material used for land reclamation projects) and beach recharge materials in the North West of England. There are a number of sources for this material, including recycled and secondary aggregates, land-based quarries and marine sand and gravel deposits.

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Westminster Gravels Ltd is applying for the licence because it has identified a market demand for the type of aggregate that could be sourced from Area 457. It is important to note that since aggregate extraction is demand led no dredging will take place unless there is a market for the material. Therefore if the demand for material in the region decreased or alternative sources (eg land based or other marine based areas) proved more attractive for the market then the volume of material extracted from Area 457 would decrease correspondingly. It should be noted that all aggregate extraction activities in the UK are commercial in nature with different companies competing for market share based on the quality and price of their product and service.

It is government policy to source a proportion of the country's aggregates from marine sources (currently targeted for at least 7% (Crown Estate, 2001)). There is also the potential for marine dredged sand and gravel to fulfil an increasingly important role supplying coast protection and beach replenishment projects in the North West of England (Crown Estate, 2001). It is acknowledged that there has been some decreases in demand for primary aggregates over the last few years as recycled and secondary aggregates have been used and the existing landbanks in some local authority areas may fall within the MPG6 guidelines. Constraints on land-based sources meeting future needs have, however, been identified and the provision of alternative marine resources have been welcomed by the local authorities in the Liverpool Bay area.

Information on aggregate extraction and landings in the ES was obtained from the Crown Estate (2001 data). In 2001 492,683 t of marine aggregates were dredged and landed in the North West region. The additional dredged material (1,154,088 t) was used for large construction fill projects and landed in Belfast Harbour (795,861 t) and Holyhead (385,227 t). The tonnage of contract fill/beach nourishment extracted in 2002 in the North West was 466,705 t landed at Ross Bay (71,025 t) and Wallasey Dock (395,680 t). We will include the updated Crown Estate data in the Supplementary ES. In addition to Crown Estate licensed areas, dredged material obtained from maintenance dredging is used for contract fill.

Demand for marine aggregate for construction fill and beach nourishment projects highly variable and difficult to predict. Over the past 2 years WGL has placed 750,000 t of marine dredged aggregate at Holyhead and Wallasey Dock. There are likely to be similar schemes to this in the future. We understand that beach nourishment schemes at Heysham (> 400,000 t) and at Colwyn Bay (>1,500,000 t) are currently being considered.

The annual maximum extraction rate of 1,200,000 t in Area 457 is designed to meet a maximum demand for construction aggregates and fill material. As with other licences in the Liverpool Bay area in most cases this maximum annual extraction volume will not be required. WGL has agreed that there will now be

no roll-over of extraction volumes from year to year. As stated above, only the material for which there is market demand will be dredged.

In summary, WGL has identified a need for aggregates in the North West region and considers that the sourcing of high quality aggregates from Area 457 could help meet this demand. As dredging activity is demand led, only material for which there is a realised market will be extracted.

2 *Impact on Marine Life*

Impacts on commercial fisheries were addressed in the ES. Following comments from consultees we have carried out further work and this will be reported in the Supplementary ES. We have also been provided with updated spawning area maps by CEFAS, which will also be included in the Supplementary ES. The ES acknowledged the location of spawning and nursery grounds within Liverpool Bay.

Our assessment indicates that the frequency and duration of the proposed dredging operations, the dredging method (limited area dredged at one time, avoidance of sediment screening) and the nature of the target resources (very low percentage of fine material) would not result in significant impacts on fish resources or commercial fisheries in the bay.

The demand led nature of aggregate dredging operations makes restricted dredging periods problematic and would require stockpiles to be stored on land in anticipation of market demand during the restricted periods. For some dredging areas, for example inshore areas with important breeding bird interests, then seasonal restrictions may be justified if significant impacts are likely. From our assessment of impacts in Area 457 we did not consider that there was any justification for restricting dredging to particular months. The main fishing period in the vicinity of Area 457 is when the beam trawlers are targeting the spawning sole. As reported in the ES there appears to be no evidence that this activity is having a significant effect on the fish population (catch per unit effort has been maintained over many years for this target species) and thus we did not consider that dredging in a more limited area and for shorter time periods would have a significant impact.

3 *Pollution Issues*

When developing survey methods for dredging projects we consult with CEFAS on the scope and methodologies required to ensure that the survey is fit for purpose. We have recently carried out a survey in an area with an overburden of fine sediment and the scope included testing for a range of potential contaminants. For Area 457 the residual current is eastwards (away from the dredge spoil site and other potential sources of contaminants) and the target resources are very low in fine materials. Significant concentrations of

contaminants in these sediments are therefore highly unlikely and this was the reason that we considered that sampling for potential contaminants was not required.

The proposed licence area was modified to exclude the dredge spoil ground to the south-east of the area, specifically to avoid disturbance of potentially contaminated sediments. This spoil ground has been used for the disposal of predominantly capital dredge works with limited volumes of maintenance dredging materials.

The target resources are relict sandwaves containing mainly clean medium and fine sands with low levels of fine material. It should be noted that WGL will be targeting the areas of good quality sand and that it is not in WGL's interests to dredge silt and mud material as this affects the quality and the value of the dredged material. The environmental seabed survey work carried out for the ES was designed to describe the different biotopes within and in the vicinity of the whole licence area with samples collected from each of the identified habitat types within the area (see ES *Figure 2.2* and *Figure C4.1*). These are based on collecting surface samples. The sediment particle size analysis of these samples is presented in the ES (see *Table C4.2*). The mean percentage of silts and muds in the surface samples collected within the proposed licence area is less than 3.25%. Photographs of samples taken from the main target resources are presented in *Figure 2.2* in the ES. *Figure 2.3* and *Figure 2.4* in the ES show examples of vibrocores taken from the main target resources showing the depth of the sand material. These samples typically have a fine material content of less than 1%.

Given the nature of the target resources, the location of the licence area and oceanographic conditions within the bay we do consider that dredging in Area 457 is very unlikely to disturb any contaminated sediments and lead to contamination of commercial fish stocks. We will provide additional information on the sediment core samples in the Supplementary ES to help substantiate our assessment.

4 *Terms of the Licence*

As detailed in the ES the terms of the licence, including any monitoring requirements, will be determined by the ODPM. At this stage it is not possible to provide detailed monitoring plans as the specific dredging programme has yet to be determined. The general principles of monitoring will, however, be expanded in the Supplementary ES. As detailed earlier a copy of your letter will be included within the consultation report, as will all consultee responses, and the report will be submitted to the ODPM, thus your concerns and comments over the proposed dredging activities and the monitoring requirements will be made known to the ODPM.

WGL is committed to the exchange of environmental information and would therefore be happy to make the results of environmental monitoring surveys publicly available, as was done in the ES.

5 *Horse Bank, Southport*

The CIS carried out by HR Wallingford investigated coastal impacts and no significant effect on sediment supply across the area or impacts on the coast or nearshore sandbanks were identified. *Section 4.3* of the CIS addressed the issue as follows:

'The sand transport patterns within Liverpool Bay have been examined through the use of the SANDFLOW model, which was used to investigate the pre-dredging and the post-dredging scenarios. The model was run for a spring tide and the sediment transport over the seabed was calculated for a range of grain sizes. It was shown that the tidal currents will only be slightly modified by the proposed dredging, and the general patterns of sediment transport will remain unchanged.'

In response to your concern about Horse Bank, we commissioned a review of sediment budget issues within Liverpool Bay (Davies, 2003) and this will be included in the Supplementary ES. The report addresses the issues of sediment transport and sediment budget in Liverpool Bay and concludes that dredging will not alter coastal processes.

We recognise that in applications such as these there are always concerns and conflicting interests that require to be balanced. We hope that the additional information to be provided in the Supplementary ES along with additional mitigation measures will go some way in addressing your main concerns.

Yours sincerely



Mark Irvine
Principal Consultant