

Mr S Eades

Friends of the Earth

Allington House
Allington
Chippenham

SN14 6LN

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Our Ref: H202/EX/7

Dear Mr Eades



MARINE ECOLOGICAL
SURVEYS LIMITED
24a Monmouth Place
BATH BA1 2AY

Tel: +44(0)1225 44 22 11
Fax: +44(0)1225 44 44 11
Email: marine@seasurvey.co.uk
www.seasurvey.co.uk

**Supplementary ES for Government View Application
Extension of Licence Area 202 (Cross Sands) for a further 5 years**

This is to acknowledge receipt of your letter dated 26th February 2006. Please accept our apologies for the delay in reply, but we have been collating the responses to the application for an extension of the existing licence at Area 202, before replying to each of the respondents individually.

GV Procedure and Area 202.

Your letter raises a number of issues which have been dealt with in some detail in the original Environmental Statement for a licence to dredge sand and gravel from Area 202 & 436, and for which a favourable Government View was given following extensive consultation. You will be aware that the application applies to a small area of seabed of only 3.077 km² and that consent is sought for removal of the remaining 1.5 million tonnes that had already been granted in the original licence. In other words, this application is for consent to continue to remove the tonnage of sand and gravel that has already been approved following a full and comprehensive Environmental Impact Assessment and Consultation process.

You will note that: This is an application for an extension in time (not tonnage) for an existing aggregate dredging licence that has been fully approved under the Government View procedure, and on the basis of ODPM advice a full new Environmental Impact Assessment and public consultation in accordance with Minerals Guidance Note 1 was not required in this instance. We hope that you will accept that we have prepared the Environmental Statement Update based on the evidence available from the 5 year monitoring programme that formed a condition to the Consent, and that we have presented all of the information on which it was based in a form which is readily available to yourself and others.

Area 436.

You make a number of points regarding the status of Area 436 which has been relinquished. We are of course aware that MMG1 recommends that the seabed should be left in a similar physical condition to that present before dredging, and this will no doubt be borne in mind by the applicant.

With respect, this is in our view irrelevant to the question of extension of the existing licence at Area 202, and the point you make is in any case merely repeating what is an integral part of MMG1.

Impact on Coastal Processes and Site Sediment.

We note that you have accepted the summary of the impacts on seabed bathymetry and sediment composition that we prepared for the main body of the text for the ES Update. As you will be aware, this information was summarised from a series of detailed bathymetric reports carried out over the past 5 years as part of the conditions attached to the licence. You will also have seen the review of these data (Appendix 6) that has been prepared by the leading experts in this field (HR Wallingford). Having read this, you will also be aware that they incorporated information from surveys for other areas in the North Sea, including a major Southern North Sea Seabed Sediment

Study (2002) into their assessment of impacts and risk associated with dredging for sand and gravel at Area 202.

You will also be aware that the original Coastal Impact Study used an extraction tonnage of 14.2 million tonnes over a period of 10 years as a basis for assessment of potential impacts on physical processes. This is about 4 times the amount actually to be extracted, including the proposed removal of 1.5 million tonnes from Area 202 that is subject of the application. It was accepted as part of the favourable Government View that no adverse effects were anticipated based on an extraction tonnage of 14.2 million tonnes. Subsequent monitoring over the past 5 years has defined the impacts on the seabed in the immediate vicinity of the dredge site and has confirmed the predictions made in the original Environmental Statement.

In the view of acknowledged experts in this field, dredging within licence Areas 202 & 436 has had no significant adverse effect on either the seabed topography or on features that might directly or indirectly affect shoreline processes. We are of course aware of your concerns, and those of local residents, but the most authoritative advice based on comprehensive monitoring at this site and numerous studies elsewhere is that this concern is not supported by the evidence.

In an effort to meet your concerns, we have asked HR Wallingford to respond separately to your views on the potential impacts of offshore dredging on physical processes, including coastal erosion.

Impact on Benthic Community.

1. Baseline Survey Data.

You will be aware from our ES Update that the original benthic baseline survey carried out in 1999 was not in our view sufficient to allow stringent quantitative comparisons with subsequent surveys, although the subsequent monitoring surveys allowed detailed comparison using modern multivariate statistical methods.

In our view, the survey data provided from monitoring surveys carried out in 2000 and 2003 provide a reliable basis for assessment of impacts because such comparisons are between dredged and undredged deposits in both 2000 and 2003. It would have been preferable to have had compatible data prior to initiation of dredging, because this may have provided information on the nature and extent of subsequent 'recovery' processes after cessation of dredging. But the assessment of impacts within the dredged areas is in our view unaffected by the lack of reliable 'baseline' survey data.

2. Sabellaria & Modiolus Communities.

You are correct to state that both of these species are of conservation significance. However, you are misinformed about the 'risk' to these communities that is posed by dredging within Area 202.

Sabellaria spinulosa.

This is a very widespread species that occurs as isolated tubes on marine gravels and shells. Where the substratum is stable, it can form extensive 'crusts' and nodules that increase habitat complexity and may support a variety of dependent species including pink shrimp (*Pandalus* spp). Such areas are often specifically targeted by fishermen and trawl trails are commonly seen in sidescan sonar images of the seabed in such areas. Direct damage under the path of the draghead is likely to occur where *Sabellaria* occurs within the boundaries of a licence area, and for this reason such sites of *Sabellaria* are commonly protected by an exclusion zone.

However *Sabellaria spinulosa* is rather sparse within the boundaries of licence Area 202 and direct damage to communities of conservation significance is not possible. This species is very resilient indeed to suspended sediment such as is associated with aggregate dredging and natural disturbance by wave action. It is listed in the MarLin website as being tolerant of suspended sediment. Many recent surveys have shown that dense communities of *Sabellaria* can develop immediately outside the boundaries of dredge zones. Such studies have also shown that *Sabellaria* rapidly recolonises gravel deposits following cessation or a reduction of dredging. The nearest site where *Sabellaria spinulosa* is moderately common is approximately 7 nautical miles to the north of Area 202, well outside any possible impact of sand mobilised by the dredging process. We note that the numbers of *Sabellaria spinulosa* recorded in the surveys is in any case relatively low

compared with true 'reef' features and consider it unlikely that patches of *Sabellaria* recorded close to the boundaries of Area 202 will be adversely affected by dredging.

Modiolus

Your reference to *Modiolus modiolus* being recorded in Area 202 and your comments regarding the importance of this 'keystone species' are irrelevant. No *Modiolus* was recorded in either of the surveys (2000 and 2003) reported in the ES Update. There is a record of a small specimen of an unidentified Mytilid (almost certainly a juvenile *Mytilus edulis*) and certainly no indication of any species or communities of mussels that warrant the views expressed in your letter.

General Comment.

The statement that '*Given that species like Sabellaria and Modiolus form the dominant biotopes, and that these species bind the seabed sediments and protect these sediments from erosion by the strong currents, it is clearly obvious that damage to them is going to have profound consequences on the overall well-being of the benthic community*' is demonstrably incorrect for the following reasons:-

- *Sabellaria* and *Modiolus* do not form the dominant biotopes. *Sabellaria* is present but not in abundance. *Modiolus* does not occur at all in the survey area.
- Damage to these organisms is unlikely, given that *Sabellaria* is well-known to be remarkably tolerant of sediment suspension and that *Modiolus* does not occur (nor would it be expected to occur on a predominantly sandy gravel substrate).

The Ecosystem Approach to Management.

Concern is expressed that an 'Ecosystem Approach to Management' is not used in the ES Update. The specific suggestion is made that you consider studies of the meiofauna, and microfauna to be '*essential because they are the basis of the marine food chain, and any evaluation of the importance of the fishery in the area has little meaning if the abundance and security of this food chain has not been assessed.*'

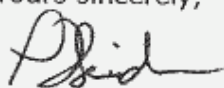
We have the following comments:-

1. Although there have been claims some years ago that the meiofauna and microscopic microfauna might be of significance in marine food webs, there is absolutely no evidence to support the view that these organisms form an important trophic link that supports fish. Most research on the meiofauna and microfauna shows that they are net dissipators of energy. About 90% of energy is lost at each step in the food web, so only 10% of primary production ends up in herbivores and by the time it has gone through the decomposer food web (the meiofauna and dependent food webs) the biomass available to support higher trophic levels is vanishingly small. Even this small amount of material is locked up in strictly sediment-dwelling organisms (mainly nematodes) that are unavailable as a food resource for the majority of organisms in the food web leading to fish.
2. Most ecologists believe that the meiofauna and microfauna recycle material through the decomposer cycle and thus make it available as nutrients to support primary production. The comments made on the importance of meiofauna and microfauna in supporting 'food chains' leading to fish is simply not supported by the evidence.

We hope that these comments are of assistance, and we enclose a copy of a response document from HR Wallingford which we hope clarifies some of the points that you raised in relation to potential impacts on physical processes.

Thank you for your continued interest and assistance in this matter.

Yours sincerely,



Dr L.J. Seiderer
Director
Marine Ecological Surveys Limited.