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8<sup>th</sup> July 2010.

For the attention of: Sharon Davies, Marine Consents Officer, Welsh Assembly Government,  
Cathays Park, Cardiff CF10 3NQ.

Dear Sharon, Marine Aggregate Extraction Application : Areas 455 and 459.

Thank you for your letter of 22<sup>nd</sup> June 2010 and the provision of Severn Sand Limited's application letter and supporting information in respect of their application to extract marine aggregate (sand) from Areas 455 and 459. We have read the supporting information and we wish to comment as follows.

1. The Non-Technical Summary, dated April 2010, supplied with this application states that Severn Sand Ltd currently has a licence to extract 250,000 tonnes of sand per annum from Bedwyn Sands which lies north-east of Areas 455 and 459. The application does not provide a reference for this licence to extract from Bedwyn Sands (e.g. no Area number), nor does it say who issued this licence, nor does it say for how long this licence runs or who supervises it. This is a serious lack of information about this existing dredging site. In addition, the licence application for Area 455 and 459 does not state whether the licence for Bedwyn Sands would be surrendered if the licence for Area 455 and 459 were to be granted.

**Recommendation: The licence application for Area 455 and 459 be rejected until clarity about the present nature and the future operation of the Bedwyn Sand licence, held by the applicant (Severn Sand Limited), is clearly stated to all consultees; and, all consultees must be asked for their approval for the new licence following the provision of this information.**

2. The Non-Technical Summary, dated April 2010, does not state the period of time for which the licence for Area 455 and 459 is being sought. The time period of the licence application therefore appears to be open-ended (although the application letter to Gloucester Harbour Trustees does state for 5 Years). Also in the Non-Technical Summary dated April 2010, the licence application states that the annual extraction amount being sought is 400,000 tonnes per annum, but that this will initially be limited to 150,000 tonnes per annum at the request of the Crown Estate. However, the licence application does not state how or when a movement from 150,000 tonnes to 400,000 tonnes per annum might be approved and licensed.

**Recommendation: The licence application for Area 455 and 459 be rejected until clarity about the time period for the licence application for Areas 455 and 459 is established and supplied to all consultees, as must the procedure by which the extraction level would rise from 150,000 tonnes to 400,000 tonnes per annum; and, all consultees must be asked for their approval for the new licence following the provision of this information.**

3. The Non-Technical Summary, the Environmental Statement and its Supplementary document, fail to mention the existence or nature of aggregate extraction in the Bristol Channel located at Areas 376, 377, 378, 379, 380, 381, 472 and 476, and the applicant's documents prepared by their consultants do not incorporate Areas 376, 377, 378, 379, 380, 381, 472 and 476 in their assessment of cumulative effect. Hence, the analysis and statement of cumulative effect from combined aggregate extraction activity in the Bristol Channel is not properly analysed.

**Recommendation: The licence application for Area 455 and 459 be rejected until the in-combination cumulative effect of extract from Areas 455 and 459 with Areas 376, 377, 378, 379, 380, 381, 472 and 476 and the unreferenced licence for Bedwyn Sands is undertaken, and the results of this cumulative effect study is supplied to all consultees; and, all consultees must be asked for their approval for the new licence following the provision of this information.**

4. The following observations are made by the applicant's consultants in the supporting documents, and we wish to comment on these observations as follows:

a/. The crest level of the sandbank at Northern Middle Ground is a crucial factor in determining the wave regime, and thus the erosive force on adjacent coastlines. The applicant's consultants expect the reduction in this crest level to be negligible as a result of aggregate extraction at Area 455 and 459 and, at most, 20 centimetres.

**Comment: The maintenance of the crest level of the sandbank is a crucial factor, and if it were to alter it could have significant hydrodynamic effects. It is therefore essential that this crest level is constantly monitored. The applicant's consultants do not openly consider in their documents whether dredging in the shallow "sinks" of the sandbank in Northern Middle Ground would cause the crest to erode, and simply assert that the "sinks" will be filled after one tidal cycle by the suspended sand moved about by daily tidal movement in the estuary. The possibility that sand may be drawn down into the "sinks" from the sandbank's crest following extractive activity needs to be considered, properly assessed, and monitored throughout any licence period.**

b/. The applicant's consultants believe that the amount of sand extracted from Areas 455 and 459, in combination with the amount currently extracted with Areas 385, 470 and 391 (additional licensed and active dredging sites in the Welsh/Middle Grounds) will not cause disturbance to the stability of sediments in the Upper Severn, and that the cumulative long-term total extraction from all these sites will be less than 1% of the sand resource in that area.

**Comment: Areas 376, 377, 378, 379, 380, 381, 472 and 476 have not been brought into this assessment of impact on the stability of the Upper Severn sediments by the applicant's consultants, and it is to be noted that the Second Severn crossing has caused a "resorting of sediments" (ref. Environmental Statement: EX 4574, April 2003, Section 1.2, page 1). Given this impact of the Second Severn crossing and the absence of a full in-combination study of**

**the cumulative effect of aggregate extraction throughout the area, it appears premature and somewhat uncertain for the applicant's consultants to assert that extraction in Areas 455 and 459 will not cause disturbance to sediments in the Upper Severn, or elsewhere in the estuary.**

c/. It is asserted by the applicant's consultants, on the basis of advice from Cefas, that the biological diversity of the Middle Ground sandbank, and the Northern Middle Ground in particular, is "naturally impoverished". Therefore, and aggregate extraction in the area will have little consequence in terms of biodiversity.

**Comment: Whilst there is apparent truth in this assertion of the applicant's consultants, to use it as a "licence to extract" is misleading. For example a sandy desert, where environmental conditions are harsh, is a fragile biological environment. Therefore any disturbance to that environment can have profound consequence for the creatures who live there, living as they do within very narrow limits of tolerance to disturbance of their environment. Consequently their physical environment needs to be carefully respected if they are to survive. Similarly, with the harsh hydrodynamic conditions in the Severn estuary (akin, in an analogous sense, to a sandy desert) it is important that respect is shown otherwise the fragile biotope will be severely damaged. There is little evidence that this form of thinking has entered into the minds of the applicant's consultants. Similarly, although the consultants have responded in the 2003 Environmental Statement to an earlier criticism that meiofauna were not considered, there is no real evidence that the fate of meiofauna has been assessed further in the April 2010 documentation. It is also to be noted that these "impoverished" sandbanks/sandflats are recorded as a possible Special Area of Conservation (sandbanks slightly covered by seawater at all times / sandflats not covered by seawater at low tide) under the EU Habitats Directive.**

Therefore, in conclusion, given the nature of the shortcomings we have outlined above in the applicant's Environmental Statement and supporting documents, we believe it would be unwise for the Welsh Assembly Government and the Gloucester Harbour Trustees to grant a licence for aggregate extraction in Areas 455 and 459 until it is established, with total clarity, that the environmental impact will not be adverse or, failing the ability to establish this with certainty, that the monitoring procedures are of such a nature and rigour to allow for the termination of the licence upon the evidence of adverse effect.

Accordingly, **we recommend**, refusal of the application at the present time.

Sincere regards

S. D. Eades  
On behalf of  
MARINET,  
Friends of the Earth Marine Network.