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29<sup>th</sup> May 2010.

For the attention of: The Chief Executive Officer, British Marine Aggregate Producers Association  
Gillingham House, 38-44 Gillingham Street, London SW1V 1HU.

Dear Sir, East Anglian Regional Environmental Assessment : Scientific Studies.

We have been in correspondence with the Anglian Offshore Dredging Association (AODA) and their consultant (Emu Ltd) since the beginning of the planning of the Regional Environment Assessment (REA) for the East Anglian licensed marine aggregate dredging sites, and our website details the full correspondence, see <http://www.marinet.org.uk/mad/objection.html>

Since the initial draft of the Scoping Study for the REA we have explained to AODA and their consultant, Emu Ltd, that for this REA to have scientific validity it must include certain scientific studies. These are:

1. On a historical basis, whether there is any scientific correlation between dredging levels in the offshore area and beach coastal erosion measurements, with erosion measurement for both before dredging commenced and since dredging commenced. See the MARINET website item: Correlations of Offshore Dredging levels with Coastal Losses' graph at the end of our briefing on this topic at [www.marinet.org.uk/mad/madbrief.html](http://www.marinet.org.uk/mad/madbrief.html)
2. A scientific study of whether there is any measurable transfer of sand from the beaches where erosion is occurring to the offshore dredging sites. This study is performed by means of tracer material placed on the beach, and its movement is then monitored and recorded. Historically, such a study of this has been done by Blackpool Council who discovered that the sand going from their beach was ending up at the dredging sites, see [www.marinet.org.uk/mad/objection/reapat1aoda.pdf](http://www.marinet.org.uk/mad/objection/reapat1aoda.pdf)
3. The REA must review the assumptions built into the computer modelling which informs the Assessment with regard to the offshore wave regime. The offshore wave regime and the height of the waves arriving on the beaches is a key factor in coastal erosion. If the sea is deepened by removal of the sea bed, the wave regime can be intensified and thus cause increased coastal erosion. In the case of the East Anglian aggregate dredging licences, nearly all licences rely on a wave regime model undertaken for Area 401/2 (a dredging area some 25 km off Great Yarmouth). MARINET has demonstrated serious flaws in this particular wave regime model, and our questions about these flaws have never been properly answered, see <http://www.marinet.org.uk/mad/objection.html#401> and

<http://www.marinet.org.uk/mad/objection.html#rea>

In particular, the Area 401/2 wave model was based on terrestrial meteorological data when it should have been based on offshore meteorological data. Terrestrial data can be used, but it must be corrected for the greater intensity of offshore wind conditions. There is no evidence in the Area 401/2 wave model that this correction was ever made. Furthermore if terrestrial data is used, it must be up to date meteorological data. In the case of the Area 401/2 wave model, the terrestrial meteorological data was over ten years or more old at the time when the wave model was calculated i.e. it was not up to date at the time of the original calculation. Hence the wave model was seriously flawed and, in MARINET's opinion, seriously miscalculated the nature of the offshore wave regime.

4. Scroby Sands, which lies some distance offshore from Great Yarmouth, used to be a significant offshore sandbank, measuring 1 mile in length and one-quarter mile in width, which was permanently above high water mark. It had sand dunes with marram grass, resident seals and terns, and was a significant physical and ecological feature. Periodically severe storms would erode the exact dimension of this offshore sandbank at Scroby, but overtime it would always be reinstated by natural processes. Since the onset of offshore dredging in the area in the 1960s, Scroby Sands disappeared following a severe storm but has never been regenerated, as would have been expected from previous experience. The disappearance of Scroby Sands and its failure to become re-established needs to be evaluated by the East Anglian REA, and the reasons for the failure of Scroby Sands to be re-established need to be determined. At the present time, there is strong circumstantial evidence that offshore dredging, which removes sand from the surrounding area, is to blame. This evidence needs to be carefully examined from a scientific perspective and correlated against wave regime predictions and measurements.

The initial draft of the Scoping Study excluded all these scientific studies which are, in our estimation, essential to the credibility and purpose of the REA.

We wrote to the AODA consultant, Emu Ltd, and we have failed to secure any response which suggests that these studies have been incorporated into the REA. Indeed, our letters of 6<sup>th</sup> July 2009 and 16<sup>th</sup> April 2010 remain unacknowledged and unanswered – see copy of 16<sup>th</sup> April 2010 enclosed.

We have also written to the Minister at Defra to request the incorporation of these scientific studies in the REA – see our website record of this correspondence – and the Minister has replied that the determination of the scope of the REA is not a matter for the government and is the responsibility of the aggregate companies.

It is essential that the marine aggregate industry proves, by means of scientific evidence, that its impact on the coastal processes of East Anglia is benign and of no concern.

This proof can be established by means of the scientific studies which we have recommended.

However AODA and its consultant have, to date, declined to include these studies in the REA.

Accordingly, we are now requesting a meeting with yourself, as Chief Executive Officer of the British Marine Aggregate Producers Association, in order to examine and discuss this important matter.

Yours faithfully

S. D. Eades  
On behalf of  
MARINET.