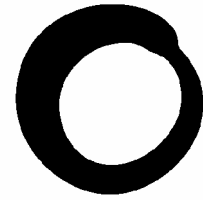




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6th October 2008

**Marine Aggregate Regional Environmental Assessment for
Anglian Offshore Region – Scoping Study**

Dear Mr Tomlinson,

Thank you for your above referenced letters dated 1 and 22 September 2008.

I was also pleased to attend your presentation at Great Yarmouth Racecourse Vice Admiral Bar on Friday September 26 2008 and to meet you.

My completed Scoping Study Questionnaire is enclosed and I am also listing my organisations main concerns in this letter.

In addition I have the following comments on your public information day and presentations at Great Yarmouth Racecourse Vice Admiral Bar on Friday September 26 2008.

The public displays and presentations all emphasised that you had already determined the study results and were attempting to convince the public that the offshore dredging in this region had no effect on coastal erosion because of the distance from the shore line where it was being carried out. This confirms my belief that this and the previous Environmental Impact Assessments (EIA) you have carried out for Hanson Aggregates Marine Limited (HAMEL) are mere appeasement.

For example, just as you provided biased answers in favour your clients (the dredging companies) to the questions put to you during the presentations, you have cherry picked findings presenting one side only to answer questions for your previous EIA consultations, you then consider that you have appeased the public and carried out the consultation process.

Obviously you are sticking to the letter of the law and government guide lines – operators (or you on their behalf) have to consult the public and concerned organisations but you have no obligation to accept their local experience, findings and evidence or change anything.

The recent Unit 3b (Kelling to Lowestoft Ness) Shoreline Management Plan extensive consultation process is a good example of this public appeasement. When this plan was circulated for public consultation during 2006 there were more than 2,400 responses, only 10 of these responses did not totally reject the plan and only 4 of the 10 found this SMP acceptable. All local authorities and organisations also opposed this plan.

There were also many local public meetings during 2006 on the implications of this SMP after the draft document was introduced, the venues for these meetings were packed and the overwhelming opinion was severe opposition to this plan – but this SMP was still implemented and local authorities were threatened by withdrawal of government funding if they failed to accept it.

Irrespective of my and Marinet views on your consultation process I am detailing our concerns to you in the hope that as a professional environmental study organisation you will give them serious consideration.

For example, if offshore dredging has not been the cause of the accelerated erosion to our coastline and the one to three metres of annual beach sand elevation loss which is sucked into the sea each winter (as detailed below) since the tonnages of aggregate removed offshore adjacent to this coastline were significantly increased during the 1980`s – what then has caused this acceleration of beach sand loss and coastal erosion which has occurred every winter since the 1980`s?

The beaches, from Winterton to Scratby did not have the annual beach level sand losses and the sand dunes and cliffs did not show accelerated erosion prior to the 1980`s before the tonnages of seabed material removed by offshore dredging were significantly increased.

Facts on increased cumulative tonnages of seabed material removed:

When offshore dredging commenced along the East coast in 1973 just 3 million metric tonnes were removed per annum, by 1992 this had risen to an annual extraction rate of 18 million tonnes, and in 1994 22 million tonnes were removed.

It is not possible to blame global warming and subsequent global sea level rises for this increased annual rate of erosion of the Norfolk coastline because:

The current rate of sea level rise due to global warming is 3.2mm a year and when you add the current 2.0mm a year of land sink (due to geological conditions) for the East coast of England this gives us a total equivalent annual sea level rise of only 5.2mm for the Norfolk coastline due to global forces beyond our control.

Factual Report of Accelerated Erosion, Beach, Marram Dunes and Cliff losses 1980 to 2007 Scratby to Winterton Norfolk Summary:

The quadruple sand dune banks which existed along the Winterton valley and the dual sand dune banks along the Newport - Hemsby valley now have only half to one third of their last sand dune sea defence bank remaining. Prior to commercial scale marine aggregate dredging these had been accreting for the past one hundred years.

The Hemsby inshore life boat launch ramp has twice been undercut by erosion and has twice been rebuilt further back.

The Winterton cliffs have suffered significant erosion and the Winterton beach access has been eroded to within a meter of the beach café.

The sand/marram grass foredunes from Newport to Scratby have had approximately 2 meters stripped from them every year and during the winters of 2005 and 2006 an average of 3 meters was stripped away leaving a 1.5 to 2 metre drop at beach access points.

The sand has been stripped from the beaches every year and sucked into the sea, during the years 2005 to 2007 this beach draw down accelerated to a depth of 2 to 3 meters stripped from the beaches between Newport and Scratby, this has resulted in spring high tides now coming right up to and washing away sections of the marram grass cliffs and dunes.

Sediment Flows and Offshore Sand Banks

It was stated during your presentations at Great Yarmouth Racecourse Vice Admiral Bar on Friday September 26-2008 that there is no way that sand from our beaches could be drawn into the dredged areas because the tidal flow along this coastline is from North to South.

It is well known that the main long shore drift sediment flow along this coastline is from North to South but alternate tides also flow South to North and the tidal flows around our offshore sand banks are complex, so sediment/sand from our beaches can and (as per factual losses, scientific tests and beach debris evidence prove) in time flow in this zigzag pattern from our beaches to offshore dredged areas to replace the dredged material.

This progressive draw down of our beaches into the sea to replace the dredged material can take many years before its effects eventually destroy the shoreline; – the 17th. Century Hallsands lesson from history confirms this, it took 18 years from the start of offshore dredging to the final destruction of Hallsands village – see report extract page 4. Consequently Norfolk coastal residents will have to live with the legacy of this intense offshore dredging for many decades to come.

It was also stated that the offshore sand banks along this section of coastline are not diminishing and have not been disturbed by offshore dredging – but:

Facts:

Discarded seabed hugging weighted trawl nets and other marine non buoyant debris are continually found along the tide line of our beaches – I state this as factual as I walk these beaches most days.

A scientific test carried out to prove offshore dredging causes beach draw down was been carried out by Blackpool Council during 2007. This test employed fluorescent tiny glass balls and radioactive tracer labelled sand and then tracking them to destination.

This test of course has intentionally not been performed by DEFRA or those employed by the dredging companies for EIA provision as it would conclusively prove that erosion was due to dredging, and that they certainly don't want revealed. The test was done by Blackpool Council because they became very worried when they lost 2" (yes - 2 inches!) of sand from their holiday beach. And where did they find it? In the aggregate landed by the dredgers!

The HR Wallingford 2002 The Coastal Impact Study -Section 6.7 Re: The Effects of Dredging on the Coastline Stated: "A system of sandbanks between the dredged area and the coastline will prevent the direct interchange of material between the coast and the dredged area". Therefore this study was acknowledging that material from these sandbanks will be drawn down and into adjacent dredged areas to replace the dredged seabed material.

These Sand banks are of vital importance to protect our coastline from storms and coastal erosion. During the 1960`s the most significant offshore sand bank "Scroby Sands" had a three mile long dry section at low tide and even during high tides a large area referred to as "Scroby Island" was still left high and dry.

Prior to 1980 a significant portion of the top of Scroby Sands offshore sand bank was visible at all low tides, but now only a narrow section of Scroby sands is visible during low water spring tides.

Further evidence of the erosion of Scroby Sands is confirmed by the fact that during the installation of the wind farm on Scroby Sands it was found necessary to change the design of the wind turbine towers foundations to include anti scour rocks around their bases because of the predicted erosion rates of Scroby Sands sand bank.

A comprehensive underwater survey of Scroby Sands underwater site was carried out this year for the wind farm energy company to establish the changes in depth of the whole wind farm area seabed. One of the findings was that there was 5 metres of scouring, the mooring bases, set sixty feet down into the seabed, were only forty-five feet down and the wind-farm to shore power cable, originally placed in a concrete covered trench, was suspended eleven feet above the seabed.

Areas 401 and 402 form the far part of the massive dredging site stretching from Caister-on-Sea in North Norfolk to Corton in North Suffolk, between three and thirteen miles offshore. Despite considerable local objections the government granted Hanson Aggregates Marine Ltd. permission to re dredge these areas and continue extracting sand and gravel from the sea bed in these previously dredged areas.

Area 202/436 is also part of this dredging site, the continued dredging of Areas 436 and 202 near South Cross Sands Sand bank have altered the profile of this offshore sand bank. The sea bed has also been noted as being lowered by some 5 metres in the areas adjacent to Cross Sands Sand bank.

Removal of seabed deposits established during the Ice Age will not affect coastal erosion; this statement was made during your presentations at Great Yarmouth Racecourse Vice Admiral Bar on Friday September 26 2008 – but seabed material deposited during the ice age stabilises the sea bed and the established sediment flows are changed if this material is removed resulting in accelerated erosion of the adjacent coastline.

The lost village of Hallsands in the 17th. Century is testament to this. The ruins at the lost village of Hallsands has been described as a testament to man's folly. The South Hams village was swept away by the sea in 1917, as a result of dredging in the bay. BBC Nature expert Andrew Cooper explained the processes and man's folly of removing material from the seabed which caused this man-made disaster in his programme. It took 18 years from the start of offshore dredging to the final destruction of Hallsands village.

It had been assumed that the removal of any shingle would be replaced naturally by more material that lay somewhere out in the channel. We now know that the same shingle which protects the nearby villages of Beesands and Torcross was deposited thousands of years ago during the ice ages, and is not being replaced.

Reference: www.bbc.co.uk/devon/outdoors/nature/hallsands/shtml

Study Reports which explain the mechanisms of beach/foreshore draw down caused by offshore dredging:

2003 EUrosion report (later modified due to government pressure) but was the considered opinion of renowned Geomorphologists when it was published. The 2003 EUrosion Project Report Extract. The following is a quote from the EUrosion Project Report “Living with Coastal Erosion – Eurosin Policy Recommendations December 2003” in section 2.2.2. Human structures and activities have exacerbated coastal erosion:

“(ii) Aggregate extraction. Dredging of river and seabed for navigational purposes (i.e. deepening navigation channels) or constructional purposes (**e.g. sand and gravel mining**) removes an important amount of sediments. This creates a sediment starvation which is in certain circumstances compensated by (re)activation erosion processes along the shore areas. This has proved to be the case in a significant number of cases including Cove do Vapor (Portugal), the Western Scheldt estuary (Netherlands and Belgium), Donegal (Ireland), Cavado (Portugal), and **North Norfolk (UK)**. In some cases, dredging activities, by modifying the water depth in the near-shore area induce wave refraction which in turn modifies the long-shore and cross-shore sediment transport patterns.”

Reference: <http://www.euroSION.org/reports-online>

The SCIENTIFIC REPORT OF SANDPIT PROJECT, April 2003-APRIL (2004 YEAR 2) MAY 2004, SANDPIT EC FIFTH FRAMEWORK PROJECT No. EVK 3-2001-00056

This scientific report is a summary and appraisal of the work done in Year 2 of the investigation. Separate management and progress reports of year 2 have also been produced. The report states that “Most of the leading European specialists on morphological modelling using 2DH and 3D models are participating in the project with the aim of validating their model systems and, hence, quantifying the impacts of sand mining.

The report notes that: “large-scale mining pits will have a significant impact on the near-field and far-field (up to the coast) flow and wave patterns; the flow velocities inside the pit will be reduced and the wave heights may also be reduced, depending on the depth of the pit. As a consequence, the sand transport capacity inside the pit will decrease and sediments will settle in the pit area, resulting in deposition. Thus, the pit will act as a sink for sediments originating from the surrounding areas and depending on the local flow and wave patterns. Hence, erosion of the sea floor will take place in the (immediate) surrounding of the pit.”

There is no indication from where sediment originates from to fill dredged pits, but there is an implication that pits may migrate as cohesiveness is compromised.

Reference: <http://sandpit.wldelft.nl/reportpage/reportpage.htm>

Martinet sincerely hope that you will seriously study the cumulative effects of the offshore dredging in this area (as shown on the enclosed diagram) and include the evidence and points raised in this letter in your studies, because previous EIA`s have stated that the cumulative effect of the intense offshore dredging along this coastline is out side their scope.

Your study should also include an up to date wave regime model, this model must use offshore, contemporaneous meteorological data in order to ensure accuracy of computation.

The wave regime model must take account of changes in the depth of the sea between the offshore sites and the coast and be based on the current spring tides high tide line – right up to the dunes/cliffs.

The changes in the nature of offshore sandbanks must be also included in the computations of this study.

The wave regime is a key factor is determining the erosive force of the sea upon the coast.

Yours sincerely for and on behalf of MARINET (Marine Environmental Information Network)
Great Yarmouth Norfolk

Mike King