CORNWALL COUNTY COUNCIL

Not Confidential

ENVIRONMENT POLICY DEVELOPMENT AND SCRUTINY COMMITTEE

6 September 2005 Agenda No. 8

RAME HEAD MARINE DREDGE DISPOSAL SITE - WHITSAND BAY

Report by Director of Planning, Transportation and Estates

RECOMMENDATION

The County Council should continue to work with DEFRA and others to encourage the development of an Options Appraisal with a view to reviewing the use of the Rame Head site for dumping of dredged material, as more information becomes available and encourage development of beneficial uses of dredge material.

BACKGROUND

1. This report follows concerns brought to the attention of Cornwall County Council by the local community, organisations and local County Council Members regarding the disposal of dredge material in the Whitsand Bay area close to Rame Head. Disposal sites for marine dredged material have been used in Whitsand Bay, South East Cornwall for up to 100 years. The sources of the material are the ports, harbours, berths and navigation channels situated in, and alongside, the Rivers Tamar and Plym as well as Plymouth Sound.

   The current site off Rame Head is licensed under the Food and Environmental Protection Act 1985 (FEPA) for which Cornwall County Council is now a consultee. This licence was granted on 11 July 2005 and runs until 31 December 2007. The licence was issued with insufficient consultation with the County Council due to poor lines of communication between Department of Environment, Food and Rural Affairs (DEFRA) and the County Council. This has now been addressed and future licence consultations will have the proper consultation with Cornwall County Council. The current use of the site has not previously been considered by Members or any Cornwall County Council Committee process.

   Between 1976 and 2005, the disposal site received over five million tonnes of dredged material from various sources.

   Following recent concerns raised locally by both residents and organisations, DEFRA agreed to investigate the environmental impacts from the dumping of dredged material within the site and possible impacts on the nearby Polhawn Cove and the Plymouth Sound and Estuaries Special Areas of Conservation (SAC). This study was carried out by the Centre for Environment Fisheries and Aquaculture Science (CEFAS). CEFAS is an Executive Agency of DEFRA.

   This work has now been completed and a report produced in May 2005. The report concluded that

   '*Evidence from monitoring surveys indicates that physical, chemical and biological impacts are localised within, and close to, the boundaries of*

the disposal site. Impacts within the disposal site are an accepted consequence of dredged material disposal and consistent with impacts recoded by monitoring programmes at other disposal sites around the UK coastline'.

However, officers of the County Council and representatives of the marine scientific community in and around Plymouth have raised several concerns with the content and scope of the report. Cornwall County Council officers' concerns are summarised in Appendix 1.

Based on these recognised shortcomings of the report, it is difficult to have complete scientific confidence in the conclusions of the report at this time, particularly in relation to the degree of potential impacts in areas adjacent to the disposal site.

Both DEFRA and CEFAS have now met with those concerned and agreed to seek to address some of the gaps in the information and examine opportunities for a full Options Appraisal to look at potential beneficial uses of the dredge material and alternative sites. No timescales for this work have been identified at this time.

PROPOSALS

2. The County Council should continue to work with DEFRA and others to encourage the development of an Options Appraisal with a view to reviewing the use of the site for dredge dumping as more information becomes available and encourage development of beneficial uses of dredge material. Should there be conclusive evidence of significant adverse impacts on the local marine environment; the County Council should not support a new licence application without appropriate mitigation being put in place.

OPTIONS

3. 1. The County Council continues to work with DEFRA and others to encourage the development of an Options Appraisal with a view to reviewing the use of the Rame Head site for dumping of dredged material, as more information becomes available and encourages development of beneficial uses of dredge material.
   2. Cornwall County Council provides continued support for the FEPA licensed activity regardless of the environmental impacts on the local marine environment.

RESOURCES

4. The County Council's Natural Environment Service staff will carry out the necessary work as part of their core function. There are no budgetary considerations with the proposals.

CONSULTATION/ROUTE

Public/Other	
Local Member(s)	John Ault

		Anticipated Date
Panel		
Committee	Environment Policy Development and	6 September

	Scrutiny Committee	2005
Executive	No	
Council	No	

CONCLUSION

5. Officers of the County Council will continue to work with DEFRA and others on the potential to review the use of the dredge disposal site at Rame Head, Whitsand Bay and a further report be brought to the Environment Policy Development and Scrutiny Committee to update and review the County Council's position as and when the outstanding issues outlined in this report have been addressed .

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OFFICER APPROVAL

County Treasurer	Yes	Name of Treasurer's Representative: Joe Jacques
Legal Issues?	No	If 'Yes', Name of Solicitor:

Appendices

1. Summary of Concerns

List of Background Documents

(under provisions of the Local Government (Access to Information) Act 1985)

None.

CORNWALL COUNTY COUNCIL

APPENDIX 1

Summary of concerns with the Centre for Environment, Fisheries and Aquatic Science (CEFAS) report on the Rame Head Marine Dredge Disposal Site.

- There is a need for **fingerprinting of some of key contaminants** such as heavy metals and Polycyclic Aromatic Hydrocarbons (PAHs) which are elevated in areas surrounding the dump site. This would establish the most likely sources of contamination (i.e. whether they are from the dumped material, sewage outfalls or natural tidal flow out of estuary.)
- There is insufficient/no comparable information on **natural background concentrations of trace metals, suspended sediment and PAHs** near the disposal site or similar Cornish Bays. Comparisons are only made with other impacted sites such as dump sites There is **no statistical analysis** of most of the results to determine if any differences between the dump site/surrounding areas and background levels are statistically significant or not. Combined, these factors make it impossible to make an informed judgement regarding the significance of contamination identified in areas outside of the dredge spoil site..
- **Biological data** provides the most accurate assessment of whether an area is impacted or not. Plant and animal communities and individual species can be very sensitive to environmental change. For example, female dog whelks develop male genitalia in the presence of low levels of Tri-butyl Tin (TBT) antifouling. The report included fairly limited biological data. The biological information is based on very few (50) samples over the 3 year period. **Longer term data sets** with larger sample sizes are vital to determine impacts against natural background conditions and variations. There is a need for studies to determine the **levels of contaminants in the tissue of shellfish and fish** in and around the dump site. They are efficient bioaccumulators of even very low levels of contaminants such as trace metals and hydrocarbons. This can be a risk to human health, species which feed upon shellfish and the ecosystem as a whole. The report included very crude mortality bioassay tests only. **More sensitive sub lethal bioassays** are now available that would give far better information on the biological effects of pollutants. There is no analysis of overall species diversity/abundance only of fauna in the sediment. Encrusting fauna is merely briefly described.
- There is insufficient information and analysis relating to the extent and implications of the presence of *Beggiatoa* which is a type of **sewage fungus**. Discussion on this is very limited despite this being potentially significant. This bacteria is normally associated with very low energy or anoxic sea lochs and would seem to be indicative of an unhealthy area of sea bed (albeit potentially quite localised) in what is quite a reasonably energetic bay like Whitsand Bay. Once again, further surveys in Whitsand Bay and comparisons with similar Cornish Bays would allow for a more informed judgement on the significance of the *Beggiatoa* mats.
- **Litter** – there is a need for more accurate determination of the sources of litter on the sea bed and neighbouring beaches. We would support improvements to dock side practises to minimise inputs and similar initiatives to decrease tourism and fishing related litter in the area as suggested in the report.
- There is a need for more stringent monitoring of dumping activity due to evidence of incidences of **non-compliance** (piles of material outside of dump site)
- There is a need for further research on the **impact of the dredge spoil site on neighbouring areas**. The impacts identified within the spoil site are what would be expected for a site receiving quantities of dredge spoil. However, there is insufficient biological and chemical data on the potential impacts on the surrounding area.