BLR 7570
DAS 31995/030222
DC 6742

Current Status of Tyne TBT Disposal Issues

From: Dr C Vivian
Date: 1 April 2003
Room: Rm 102
CEFAS, EM
Burnham Laboratory
Tel: 016 2178 7253 (direct line)
Email: c.m.g.vivian@cefas.co.uk

To: Mr G Boyes - DEFRA-MWD, LNH

cc: Miss S Reed - CEFAS Burnham Laboratory
Dr L Murray - CEFAS Burnham Laboratory
Mr G Bowles - DEFRA-MWD, LNH
Mr M Smith - DEFRA-MWD, LNH
Mr A Dixon - DEFRA-MWD, LNH

A few points in response to your email to Sue Reed:

1. We are not in a position at present to accept Prof. Fleming's framework for the Tyne, much less for general application. There are quite a number of issues with the framework as well as the supporting document to the application that are not acceptable as they stand. For example:

- OSPAR's policy on the reduction of inputs of hazardous substances is not addressed. This alone may be sufficient to scupper this proposal.
- The assumption that the sediments at the disposal site are aerobic.
- We estimate that based on the data provided with the application, the 76,000 cubic metres of contaminated sediments (excluding Walker Technology Park and Bill Point) contains over 1.5 tonnes of TBT. This compares to an annual input in recent years at Souter Point of 0.1 to 0.2 tonnes TBT
- The range of alternative disposal options considered in Tables 4 and 5 of Prof. Fleming's report are by no means comprehensive and therefore needs to be re-done.
- The disposal site is assumed to largely retain the dumped material. However, we know that there is transport of sediment away from other disposal sites close by.
- Transport of sediment away from the disposal site does potentially raise the risk of contaminating fish and shellfish. This has been dismissed in the application but it will need to be re-visited once we have the modelling results in.
- An incorrect interpretation of disposal management techniques mentioned in the OSPAR Guidelines used in support of their preferred option.

- The acceptance of effects from TBT at the disposal site. They predict that TBT levels on the disposal site will take from 3.5 to 11.5 years to fall below a level of 1 mg/Kg equivalent to our current Action Level 2. They state that long-term biological impacts will be expected during that period. I cannot see how this could be acceptable.

2. In any case, the OSPAR and London Convention Dredged Material Guidelines are THE currently accepted frameworks for assessing dredged material for disposal at sea. Additional, guidance on dealing with contaminated sediments is available from PIANC.

3. Since the data on TBT with the application is 4 years old, we will need to thoroughly re-sample all the areas covered by the application. I also understand from Robin Law that we have a problem with high PAH levels in the Tyne that will also have to be taken into consideration.

4. The issue with Prof. Fleming's weighting is that because the scale for economic issues goes from 1 - 7 while the scale for environmental issues goes from 1 - 5; this biases any combination of scores to more heavily weight the economic issues. For example, for a high cost and low environmental risk the score would be 7+1=8 whereas for a low cost and high environmental risk the score would be 1+5=6.

Thus, we are a long way from being able to accept Prof. Fleming's framework. There is also much work to be done by the Port of Tyne on their application to address many important issues, particularly those mentioned above, before we will be in a position to determine the application.

Dr C Vivian