

MINUTES OF THE MEETING HELD TO DISCUSS THE TRIAL CAPPING PROJECT OF CONTAMINATED DR5EDGED MATERIAL FROM THE PORT OF TYNE DISPOSAL held on 10 MAY 2006.

Attendees:

Andy Greaves, Alan Dell, Andy Dixon, Tim Hanham – Defra MCEB
Chris Vivian, Sylvia Blake, Jon Rees - Cefas,
Juliette Parker - MFA,

Keith Wilson, Brian Reeve - Port of Tyne Authority
Professor Fleming - Envirocentre
Jonathan Wilson - Envirocentre

1. Andy Dixon (Defra) set out the context of the meeting which was that Defra believed that the cap covering the contaminated material deposited at the Souter Point disposal site is not thick enough and therefore more material should be added to ensure its integrity. Envirocentre disagree with this assessment and the meeting was held to agree a way forward.

Cefas Presentation Including Risk Assessment - Jon Rees (CEFAS)

2. Jon Rees (Cefas) gave a presentation setting out the scientific assessment which informed Defra's view that the cap is not thick enough and will require further capping material to be deposited.
3. Jon explained that the assessment took into account all the information supplied to Defra in the form of monitoring reports as required by the licence conditions including bathymetry data, analysis of the cap, other surveys and additional sediment transport modelling. This assessment indicated that there were areas of the cap that was at risk where the thickness was significantly less than the 1.5m cap required by the FEPA licence (31995/05/0). The current cap has a maximum thickness of 0.7m with a median thickness of between 0.2 and 0.25m which could well be exposed to events that would affect its integrity.
4. Defra's main concern was that modelling from existing data has indicated that at worst a major storm could remove up to 0.66 metres of sediment which would seriously compromise the integrity of the cap and the confined contaminated material underneath. There was also concern from Defra and Cefas that a series of moderate storms removing 0.15m of material per storm would remove the cap in 3 years.
5. Professor Fleming suggested the assessment was based on a worst case scenario and as such showed a greater impact than was likely in reality. This was accepted but Jon Rees stressed that it was reasonable to use this approach especially as Defra are required to use the precautionary principle when it comes to protecting the marine environment.

6. Professor Fleming also pointed out that sediment movement would not just be in one direction under storm conditions. Chris Vivian and Jon Rees accepted this but as the sediment were unconsolidated and more mobile the net movement would be away from the site.
7. Jon Rees concluded that the Cefas assessment was the best that could be carried out with the data available. Brian Reeve (Port of Tyne) queried the availability of wave data at 50m and Jon Rees accepted that there was less wave data than hoped for partially because of the loss of measuring equipment during the last survey. Cefas concluded that the existing cap is patchy with significant areas of less than 1.5 metres cover as required by the FEPA licence and recommended the cap thickness be increased to secure its integrity. There was also a need to install a wave rider buoy to measure wave height and wave return period for the Souter Point disposal site.

Port of Tyne response

8. Keith Wilson (Port of Tyne) reiterated that when they spoke with the Minister in December 2003 regarding the trial they viewed it very much as a trial with lessons to be learnt for the dealing with contaminated dredged material around the UK. Keith's view was that whilst some conditions have not been fully met, the conditions on the licence should be reviewed rather than taking action to ensure that they are fully met. Defra explained that we would not review the conditions but would work with PoT to ensure that the trial is a success.
9. Keith also stressed that the trial was a costly operation at £3.2 million for which they got funding from the Government Office of the North East and that adding further material to the existing cap would cost another £1 million. It was the Port of Tyne's opinion that in the spirit of the trial it would be better to continue monitoring the existing cap rather than immediately going out to augment the cap. Keith said there is no evidence of a detrimental impact from the capping trial so far and any urgent addition of capping material would invalidate the current monitoring regime.
10. Professor Fleming explained that he had originally argued against the use of a cap as his experience was that TBT would break down in the marine environment. Andy Dixon explained that whilst we accept that this can occur in an oxic environment, international conventions prevent the introduction of contaminated dredged material to the marine environment (hence the cap) and in any case the material was also contaminated with heavy metals which do not break down.
11. Jon Rees stressed that the capping method had been agreed by all and there had been no loss of contaminated material during the capping exercise although there was a loss of silt which was compensated for by an increase in the levels of the sand cap. The trial

was carried out properly and material placed accurately but the consistency in thickness of the cap was the main issue. Professor Fleming did not dispute the variation in the cap thickness but the 2005 monitoring results showed that no contaminated material was exposed on the top of the cap. He suggested that they continue monitoring until it identifies contaminated dredged material at the surface of the trial area.

12. Andy Dixon supported by Chris Vivian stressed that Defra would not allow recapping to wait until monitoring has identified contaminated material exposed at the surface as the capping trial is designed to ensure that the contaminated material is isolated from the marine environment. If Defra was to allow this to happen then they would be open to criticism for not protecting the marine environment.
13. Professor Fleming argued that contaminated material has been disposed of at the site in the past and that there was a need for further data to show whether or not storm activity had exposed contaminated material or not. If material is added to the cap now it would change the terms of the trial. Chris Vivian stated the terms of the trial had already changed because of the inconsistency of the cap.
14. Andy Dixon agreed that prior to regulation the disposal site had received contaminated material as there were no controls on its disposal but since regulation we are now obliged to prevent such material from being disposed of to sea and must not be seen to be increasing the risk of contaminated material being exposed to the marine environment. The cap should be remediated and the trial must be reviewed. In this case PoT had not fully met the terms of 3 licence conditions. Specifically ensuring that the integrity of the cap is maintained, moving to tier two monitoring and convening an annual meeting with stakeholders. The cap was designed to be 1.5 metres thick and scientific evidence showed this depth had not been reached consistently which puts the integrity of the cap at risk.
15. It was accepted that the Port of Tyne were complying with the condition regarding the integrity of the cap by meeting with the Licensing Authority but stressed that a way forward needed to be found. Keith Wilson did not dispute the need to comply with the conditions of the licence but the requirement to cap the deposit created real financial pressure on the Port of Tyne. Brian Reeve stated the capping was done quickly at Defra's request and now Defra was asking for another large volume to be deposited quickly.
16. Andy Greaves stated Defra could not leave the situation as it was. The Port of Tyne must be seen to be complying with the licence conditions. Chris Vivian suggested the cap should be surveyed and then agreement could be reached on what volume of material should be added.

17. Keith Wilson suggested that they could continue to deposit maintenance dredgings onto the cap and would be happy to discuss with Cefas what volume of material would be sufficient. Professor Fleming suggested a long term plan should be devised to deal with contaminated sediment in the Tyne or they risked closure of the Port. There was always an element of risk in such a trial – a second survey would add to the picture of the effectiveness of the cap as it existed now.

Conclusions and way forward.

18. Andy Dixon confirmed that Defra were content for the Port of Tyne to continue with monitoring provided that in tandem with this the Port of Tyne work up a practical and achievable plan of action for adding further capping material to the trial site. The further monitoring was to be agreed with Cefas who would help work up a method for further capping. Chris Vivian suggested a meeting to review the further monitoring results and the plan for further capping should be planned for mid July. In addition the next disposal return to OSPAR must include data on the capping trial so Cefas may need to liaise with the Port of Tyne to provide a package.
19. Andy Dixon also stressed the importance of the Port of Tyne holding a stakeholder meeting and suggested that the Port of Tyne should write to interested parties giving possible dates as soon as possible.
20. Prof Fleming stated it was important to disseminate best practice and to be aware of what has been done well and what hasn't. There was a need to invite other Port Authorities to meetings concerning the capping trial. Keith Wilson stated the Government should become involved since many UK ports need a solution. Andy Greaves confirmed that DEFRA was working on a Framework Document covering a number of different approaches to the management of contaminated dredged material.

Date of next meeting

21. The next meeting was arranged for 10.30 a.m. on 26 July at Whitehall Place.

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