

Dredged Material Assessment – Three Major Problems from an England and Wales Perspective

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Three Problematic Dredged Material Assessment Problems

1. Chemical versus Bioassay Assessments
2. EQS Directive – Legally-binding sediment standards
3. Application of Article 2.3 of the Revised Waste Framework Directive

1. Chemical Analysis vs Sediment Bioassays

- Traditional method of assessing sediment quality
- Usually total amounts of contaminants determined
- Cannot accurately predict biological effects
- Impossible to analyse for every single potential contaminant
- Not widely used in the UK
- Biological responses reflect bioavailability
- Empirically addresses problems of interactions between contaminants
- Bioassays are the only way of directly assessing toxicity

2. EU EQS Directive –sediment standards

- EU Commission submission to SCHER asked “Does the SCHER believe that the current state of technical and scientific knowledge is mature enough to support the development of legally binding standards for sediment and/or biota?”
- SCHER said “Yes”.
- How will these standards be applied?
- Will they take account of varying background levels of naturally occurring elements?
- How will they affect the dredging and disposal of dredged material?

3. Application of Article 2.3 of the Revised Waste Framework Directive

- “Sediments relocated inside of surface waters for the purpose of managing waters and waterways or of mitigating the effects of floods and droughts shall be excluded from the scope of this Directive if it is proven that the sediments are non-hazardous and without prejudice to compliance to obligations under other relevant Community legislation.”
- How do we PROVE sediments are non-hazardous?
- However, how widely do we expect this exemption to be used?