

Dr. Karen Creed, DAS Licensing, EPA. Johnstown Castle, Wexford, Co. Wexford. 1.4.2011.



Re: Lower R. Suir – Waterford Harbour: Habitats Directive Annex II fish species and dredging –request from Waterford Corporation

Dear Karen,

Further to my earlier letter and subsequent conversation, it remains my opinion that back hoe dredging should be the principal dredging method to be used in the Waterford Corporation application. This method would fully remove the areas of silt/sand deposition from the areas of impact, rather than dispersing them (via plough dredging) and having subsequent settlement in wide areas of the waterbody.

As stated previously, the cross-section drawings provided indicate that deposits come close to the surface under and inside the current pontoon moorings. I understand that, in low tide conditions, the upper contours of these deposits are visible above the waterline. Digging using excavator would be most effective in such low tide conditions as there would be least contact or exposure to overlying water. Thus the digging might be almost 'in the dry', reducing the amount of water going into the dumping barge. This approach would lead to most cost-effective filling of the barges.

If the low-tide portion of the tidal cycle is used for back hoe dredging there would be the least amounts of suspended solids generated to the water column. The work would also be in a confined area, with digging activity at any one time confined to a small area within the overall site to be dug. This would differ considerably from the plough dredge, I believe, as that method might be disturbing large areas consistently and thereby would be likely to generate regular or consistent suspended solids plumes.

The following suite of actions may provide for achievement of Waterford Corporation's requirements while also mitigating against adverse ecological impacts that may arise from extensive, continuous suspended solids release//entrainment:

- > the back hoe dredging as the primary mechanism for removal of deposits,
- > timing of works within the low tide portion of the tidal cycle,
- > discrete localised digging to attain the desired OD before moving to another adjoining discrete section

A strategy incorporating these items would constitute a positive approach and series of mitigations respecting the existing closed period and should permit a moving forward of the works date into mid May, approximately.

I would be pleased to review this further with you, as required.

Yours sincerel

James J. King

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