Environment, Marine & Fisheries GroupMarine & Fisheries Division



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Dear Mr. Sheehan,

Warrenpoint Harbour Authority proposed dredged material new disposal site within Carlingford Lough – Environmental Assessment Requirements

I am writing in relation to the Warrenpoint Harbour Authority proposal for a new maintenance dredge disposal site in Carlingford Lough.

The Marine Works (Environmental Impact Assessment) (EIA) Regulations 2007 (as amended) transpose the provisions of the Environmental Impact Assessment (EIA) Directive (97/11/EC) into UK Law. The Marine Works (EIA) Regulations apply to activities, which require a marine licence, under Part 4 of The Marine and Coastal Access Act 2009.

The Department carried out a consultation process under the Marine Works (EIA) Regulations 2007 (as amended), to determine if the proposal would require an EIA to support the marine licence application. The consultation responses are attached to this letter as Appendix !.

As you are aware, the Marine Management Organisation recently determined that the designation of a new dredged material disposal site did not require an EIA, because the designation of a new disposal site is not listed on Annex I or Annex II of the EIA Directive (85/336/EC).

Therefore, in line with this determination, the Department is content that the proposal by Warrenpoint Harbour Authority does not require a full EIA to be carried out. However, Part 4, chapter 1, section 67 (4) of the Marine and Coastal Access Act 2009 (MCAA) states:

'The appropriate licensing authority may require an applicant -

- a) To supply such information
- b) To produce such articles, and
- c) To permit such investigations, examinations and tests

as in the opinion of the authority may be necessary or expedient to enable it to determine the application'.

Therefore, Warrenpoint Harbour Authority will be required to submit to the licensing authority, such information as required to support the proposal for a new dredged material disposal site within Carlingford Lough. The factors to be considered when selecting a disposal site are listed in Annex III Part B and C of the London Convention 1972. These have been further refined in the Waste Specific guidelines that supplement Annex 2 of the 1996 Protocol, of which the UK Government is a signatory.

Information on the disposal of dredged material at sea can be found in the OSPAR guidelines:

http://www.ospar.org/work-areas/eiha/dredging-dumping

Section 9 of the OSPAR guidelines for the management of dredged material at sea also includes useful information on the selection of a sea disposal site and what should be considered when selecting a new disposal site for dredged material: http://www.dredging.org/documents/ceda/downloads/environ-ospar-revised-dredged-material-guidelines.pdf

Warrenpoint Harbour Authority will be required to carry out additional assessments and studies to support their proposal. This should take the form of a 'Site Characterization Report'. A characterization exercise will be carried out, which will be of a similar nature to the EIA process. This will include a scoping exercise, stakeholder consultation (including public advertisement), investigation of potential adverse effects, survey and mitigation requirements and also the final 'Site Characterisation Report'. A Habitats Regulations Assessment will also be required to support the final marine licence application

Therefore, the next step will be for Warrenpoint Harbour Authority is to complete a 'site characterisation' scoping report. The Department will then carry out a consultation exercise on the scoping report to determine potential environmental (and any other) impacts of the proposal. This consultation will follow the similar timelines as those set out in the Marine Works (Environmental Impact Assessment) (EIA) Regulations 2007 (as amended).

Once this scoping stage is complete, the Department will then be in a position to further advise Warrenpoint Harbour Authority what should be included in the final 'Site Characterisation Report'.

If you have any further questions please do not hesitate to contact me.

Yours sincerely

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Claire Vincent

Marine and Fisheries Division
Head of Marine Strategy and Licensing Team Head of Marine Strategy and Licensing Team

Appendix One – Consultation Responses

1. Marine and Conservation Reporting Team – Marine Conservation Team Response

I have assessed the application and the associated documentation for this proposal. It is the opinion of MCR that an EIA will be required for this project. The primary reasons for this are detailed as follows, however they are all related:

- An Environmental Statement is required to demonstrate that in-Lough placement of dredged material will not negatively impact on the ecology of the Lough. Within Carlingford Lough there are both European and nationally protected sites. Please note the pMCZ has not been listed in section 3.2.4.
- In addition to designated sites, assessment also needs to be made on potential impact to marine protected species, this should include both national and European protected species. Unlike assessment made under the HRA which looks at impact at the population level, under the legislation for protected species, it is the individual animal which is protected. Further information can be found at: https://www.daera-ni.gov.uk/articles/marine-wildlife-licensing
- The Environmental Statement will also need to explore the impact on the bathymetry and the knock-on effects changes to this may have to the surrounding habitats and coastline. This will involve analysis of how the dredged material redistributes within the Lough. As suggested in the report this will require hydrodynamic modelling to ascertain dispersion.
- At this stage I am not in a position to say how the proposed disposal locations will impact on either the pMCZ or intertidal ASSIs. The report itself stares that hydrodynamic modelling would be required to determine the dispersion and fate of the disposed material.
 - I also feel that we should request seabed/faunal surveys of both disposal sites in order to rule out the presence of priority species or habitats which would need assessment in a Northern Ireland context before permitting smothering by the dredge material.
 - I also question whether or not the reference to NE's policy on management of estuaries applies in the case of Carlingford Lough which is clearly a sea lough, not an estuary (as determined by salinity regime and water depths)

I am somewhat confused as to what the bulk of the report, namely the pages and pages of sediment analysis are trying to tell us. A simple summary table detailing which (if any) parameters exceed EQS's

Given the above uncertainties I believe that further work is required in order to determin that protected species, habitats and sites will not be impacted by the proposal for in-lough disposal.

2. Marine Conservation and Reporting Team – Marine Archaeology Response

Although Carlingford Lough is recognised as an area of archaeological and historic potential with numerous documented instances of historic shipwreck there has been no previous archaeological work conducted, or an appraisal of existing geophysical data, at either proposed disposal location.

Presently there are no recorded designated sites, or known archaeological remains, within the proposed disposal site(s) but the possibility of remains being present cannot be conclusively discounted without more detailed characterisation of the receiving environment and an archaeological appraisal.

Therefore, before a decision can be made with regard to the necessity of an EIA on archaeological grounds an archaeological appraisal of the receiving environment is necessary in order to exclude potential damage or burial to hitherto unrecorded historic wreck sites. This archaeological appraisal should form part of any further more detailed characterisation work at each of the proposed disposal sites.

3. NIEA - Conservation Science

- Warrenpoint Harbour Authority proposes to implement a revised dredging regime
 within Warrenpoint Harbour. This would involve more frequent dredging operations
 than at present but would use a smaller vessel which would remove a smaller
 volume of material on each occasion. The Harbour Authority also proposes to
 dispose of dredged material within Carlingford Lough, rather than at the currently
 used open sea site which is located at a point approximately 10km south-east of
 Cranfield Point.
- Carlingford Lough has been designated as a Special Protection Area under the EU Birds Directive because of its internationally important wintering population of Lightbellied Brent Geese and breeding populations of Common Terns and Sandwich Terns. The Carlingford Lough Area of Special Scientific Interest also holds nationally significant numbers of wintering Great Crested Grebe, Shelduck, Scaup, Redbreasted Merganser, Oystercatcher, Dunlin and Redshank.
- The proposed dredging site lies outside the boundary of the Carlingford Lough SPA and the area is relatively unimportant for any of the feature species. The harbour is also located adjacent to, but outside the ASSI.
- Amongst the ASSI feature species, open-water species such as Great Crested Grebe,
 Scaup, and Red-breasted Merganser are unlikely to be affected by dredging within the harbour or additional vessel movements required for spoil disposal. The

shoreline and mudflats between Warrenpoint and Newry support generally small numbers of wintering shorebirds but Redshank numbers can be locally important. Only a small proportion of these would potentially be susceptible to disturbance during dredging. Significant displacement from feeding areas is, however, improbable.

- Two potential sites for the disposal of dredged material have been identified within Carlingford Lough on the basis of distance from the dredging site, water depth, tidal current strength and proximity to designated sites and areas used for aquaculture. The suitability of the proposed disposal sites has still to be further tested by hydrological modelling, however.
- Both proposed disposal sites are located outside the Carlingford Lough SPA. The
 western site (319816, 313721) is approximately 560m from the SPA boundary at Mill
 Bay, which is the principal foraging area for Light-bellied Brent Geese. The eastern
 site (324598, 310420) lies between Green Island and Blockhouse Island,
 approximately 620m from the SPA boundary at the former. Green Island is the only
 breeding site for Common and Sandwich Terns in Carlingford Lough.
- No data on usage of the open water around the disposal sites by wintering waterbirds are available. It is therefore unclear if either of the sites is within an important foraging area for these species. There is a possibility that ASSI feature species, particularly Great Crested Grebe, Scaup and Red-breasted Merganser, could be subject to disturbance by vessel movements. Foraging by these species might also be disrupted by deterioration of water quality through increased turbidity, pollution or changes to benthic habitats through sedimentation. This requires detailed assessment.
- Should the dredged material contain any toxic contaminants, sediment drift from the western disposal site into the Brent Goose foraging areas in Mill Bay would be a concern. It is noted, however, that the screening report indicates that material from Warrenpoint Harbour has previously been within permitted levels of contamination for offshore disposal. While this appears to suggest that a risk of pollution would be very low, contaminant levels within the dredged material need to be clarified given the context of disposal within a lower energy level estuarine environment rather than the open sea. CS notes the potential benefits to intertidal habitat dynamics (in the absence of significant pollutants) of retaining the dredged material within the Carlingford Lough sedimentation system.
- CS has substantial concerns regarding use of the eastern disposal site. This is located
 in proximity to the tern breeding site on Green Island. There is therefore potential
 for disturbance of nesting birds by vessel movements close to the island and a
 danger of low-lying nests being flooded by wash from the vessel. The impact of
 navigation associated with this project should be assessed in combination with that
 from existing shipping and the proposed Greencastle Greenore ferry. The sea area
 around Green Island has also been identified as an important tern foraging area
 (Allen & Mellon 2015). Consequently, there is potentially a risk of degradation of

feeding conditions through deterioration of water quality through increased turbidity affecting visibility, or through pollution or changes to benthic habitats arising from increased sedimentation affecting prey species. Given that any decline in prey availability close to the nesting site would result in energetic costs to terns from obtaining food from more distant sites, this could result in reduced breeding success. CS therefore recommends that, given the potential for an adverse impact on SPA feature species, a precautionary approach is taken and the eastern disposal site is considered unsuitable.

- The screening report identifies the following issues potentially impacting upon birds as requiring further assessment:
 - Water quality
 - o Sedimentation
 - o Changes in benthic habitats
 - o Impact upon protected species

Conservation Science concurs that these are the principal areas of concern and recommends that a full Environmental Impact Assessment be carried out..

Reference:

Allen, D. & Mellon, C. (2015) Validation of selected tern foraging areas associated with breeding colony SPAs. Unpublished report to Northern Ireland Environment Agency, Allen and Mellon Environmental Ltd

4. NIEA – Conservation, Designation and Protection

The proposed application sites are located approximately 560m (western site location-Mill Bay) and 620m (eastern site-between Green Island and Blockhouse Island) from Carlingford Lough SPA, Carlingford Lough. CDP Based on the information provided it would not be possible to determine that there would be no impacts on the features of the Carlingford Lough SPA/ASSI and further information is required as follows:

- O Usage date relating to the open water around the disposal sites by wintering water birds is not held by the Department. It is therefore unclear if either of the sites is within an important foraging area for these species and there is potential for significant disturbance due to the proposed activities. Detailed assessment of the usage of these areas is required.
- O While it is acknowledged that historical dredging has not yielded significant contamination, contaminant levels within the dredged material need to be clarified given the context of disposal within a lower energy level estuarine environment rather than the open sea. Information in relation to contamination levels should be provided/clarified in relation to the proposed disposal location.
- Given the comments by NIEA Conservation Science Ornithology Team (CS),
 the eastern disposal site is located in proximity to the tern breeding site on

Green Island. There is therefore potential for disturbance of nesting birds by vessel movements close to the island and a danger of low-lying nests being flooded by wash from the vessel. The impact of navigation associated with this project should be assessed in-combination (as required by the Habitats Regulations) with that from existing shipping and the proposed Greencastle – Greenore ferry. The sea area around Green Island has also been identified as an important tern foraging area and there is potential for degradation of feeding conditions through degraded water quality. In agreement with CS it is recommended that a precautionary approach is taken on the basis of information currently available and the eastern disposal site is considered unsuitable.

CDP is content to be re-consulted in regard to any future submission.

5. Commissioner of Irish Lights

While accepting the rationale behind the proposal it is clear that sediment that once was entirely removed from the Lough will now be preserved in the Lough. If the sediment originates from the land one would assume that over time this would potentially reduce depths in certain areas of the Lough. As there are many different types of vessel operating throughout the area we would conclude that this proposal would require ongoing close monitoring of water depths by hydrographic surveying which depending on the findings may in result in changes to the positioning and type of local aids to navigation.

6. Maritime and Coastguard Agency

This agency has no comment on the need or otherwise for an EIA regarding this proposal.

7. DAERA Sea Fisheries

We have a number of licensed aquaculture sites within Carlingford Lough, this proposal could have a detrimental effect on the stock and livelihoods of the operators.

As shellfish are filter feeders' and are sensitive to water quality, any dredge spoil disposed within the Lough could have a serious impact upon our licensed sites - this is why we would request an EIA.

8. DAERA Marine Strategy and Licensing Shellfish Team

Both proposed sites are within the Carlingford Shellfish Water Protected Area (see attached map).

We would therefore advise that a full Environmental Statement is prepared by the applicant to examine the potential effects of the disposal operations both spatially and temporally on the protected area.

9. Department of Housing, Planning, Community & Local Government Marine Planning & Foreshore Section

I wish to acknowledge receipt of your email and enclosures dated 29 September last in connection with Warrenpoint Harbour Authority - EIA Screening Consultation for new inlough disposal site within Carlingford Lough.

The Department has no comments to make on this matter as it appears that the main issues are potential impacts on aquaculture activities on the southern shore, which is a matter for consideration by the Department of Agriculture, Food and Marine. It is noted from your correspondence that you have already sought a response to the consultation from that Department.

10. Ulster Wildlife

Thank you for contacting Ulster Wildlife in relation to the proposed new dredge disposal site in Carlingford Lough. Ulster Wildlife recommend that an EIA is a requirement to be carried out.

This decision is based on:

- Close proximity to proposed MCZ with sea pens being very sensitive to impacts of silting.
- Close proximity to NI SPA/RAMSAR sites and possible impacts of silting on wading bird prey species.
- Close proximity to commercial aquaculture sites and follow on implications for human health and possible commercial impacts.
- Records of several NI priority species in close proximity to the proposed dredge spoil dumping sites, including Modiolus modiolus.
- Records of two OSPAR threatened and/or declining species in close proximity to the proposed dredge spoil dumping sites (Ocean Quahog and Thornback Ray).

Please see the attached graphic for overlaid CeDar data. Please do not hesitate to contact us for further information or discussion.

11. UK Hydrographic Office

Regarding the EIA screening consultation for proposed in lough disposal sites within Carlingford Lough:

The UK Hydrographic Office has no comment to make on this proposal, other than to request we are informed of the outcome so that navigational charts can be updated if necessary.

12. RSPB

The two proposed disposal sites are located within the Carlingford Lough proposed marine extension Special Protection Area (SPA). Additionally, the two sites are less than a kilometre form the current Carlingford Lough SPA/ASSI, as well as close to Carlingford Shore Special Area of Conservation (SAC) and Carlingford Lough SPA in the Republic of Ireland. Due to the location of the proposal, we would consider that this project has the potential to result in adverse environmental impacts and would thus deem that an EIA is necessary for this application. We recommend that the site features of all designated sites are considered from the outset of the project.

The nearby Carlingford Lough Important Bird Area (IBA), Carlingford Lough RAMSAR site and the future proposed Marine Conservation Zone (MCZ), should also be considered as priority sites within any EIA in order to fully assess all potential impacts from the proposed development. It should also be noted that RSPB has a considerable interest in the area in the vicinity of the proposal due to the presence of our reserve holdings at Green Island and adjacent to offshore islands.

Potential impacts could include, but are not limited to:

- Disturbance on birdlife, both breeding and wintering
- Displacement of birds from areas of feeding
- o Temporary or permanent habitat loss or change
- o Pollution
- o Siltation
- o Indirect habitat loss through small-scale changes in sediment structure
- o Degradation of the quality of the surrounding marine environment
- o Noise
- o Increased erosion to Green Island due to wash from vessels.

We recommend that the consultants appointed to carry out the EIA, contact us at the scoping stage. We can then provide information on data requests, site features, expected level of bird survey and mitigation. Therefore as much information as possible regarding the timing and phasing of works and the construction methods should be provided at this preliminary stage.

13. Bord lascaigh Mhara/Irish Sea Fisheries Board

The proposal to dispose of dredge spoils within Carlingford Lough is extremely likely to have a significant effect on the environment by virtue of the type of material to be disposed (Fine sediments with levels of cadmium, chromium, nickel and zinc above Action Level 1). Also the repeated nature of the proposed activity and the location of the project in a transboundary lough adjacent to protected sites and aquaculture operations producing shellfish for human consumption, underlines the requirement for sufficient environmental assessment and consultation. Thus, we feel that a full EIA is required in this instance.

14. NIEA Earth Science

I have looked through the Warrenpoint Harbour EIA screening report and although I can see no direct threat to the Earth Science components of the Carlingford Lough ASSI there is the possibility that deposition of sediment, particularly at location 1 (P. 13), could impact geological features at Cranfield Point depending on sediment dispersal. It would be useful to see the results of hydrodynamic modelling.

15. RYA

The RYA has no comment to make on whether an assessment is undertaken within or outside of the EIA regulations. However, we would expect that any assessment considers any potential effects on the local RYA clubs and training centres (including the local outdoor education centres), along with visiting recreational vessels. The assessment should consider if the additional vessel movements, changes in hydrodynamics or increased sedimentation may affect the safety or viability of recreational boating activities which take place in the lough, including those such as racing, cruising, anchoring and mooring which commonly take place outside of the shipping channels.

16. Loughs Agency

Carlingford Lough and its surrounds consist of several designated sites, the proposed project does not require a mandatory EIA, however, due to the sensitive nature of the receiving environment, likely significant effects cannot be ruled out without further more detailed assessment. The Loughs Agency would be in favour of an Environmental Impact Assessment in this case due to the proximity of the proposed disposal sites to these protected sites.

The Loughs Agency would have concerns regarding potential impacts on the passage of migratory fish, especially Atlantic salmon, Sea Trout and European Eel.

Furthermore, the proposed disposal sites are within close proximity to licensed aquaculture sites, both for Blue Mussel and Pacific Oysters, both in NI and ROI. There is also an existing proposal for a Marine Conservation Zone under the Marine Act.

The applicant should also note that it is an offence under Section 41 of the Foyle Fisheries Act (1952) to cause pollution, which is detrimental to fisheries interests.

17. UK Chamber of Shipping

UK Chamber of Shipping has no particular comments to make on this proposal.