

# Deposit of Solid Waste (e.g. Dredged Material) in the Territorial Sea and Controlled Waters Adjacent to Northern Ireland

### Marine Licensing

Important: before completing this form, please read these notes carefully.

The following numbered paragraphs correspond to the questions on the application form and are intended to assist applicants in completing the form. These explanatory notes are specific to this application and so applicants are advised to read these in conjunction with the General Marine Licensing Guidance document. However it may be that these notes do not fully cover all the questions that you may have. If further clarification is needed please telephone us on

02890 569247 or email

MarineLicensingTeam@doeni.gov.uk

For fees categories please see Marine Licensing Fees Addendum

For further Guidance please refer to Marine Licensing Guidance for Applicants

### **EXPLANATORY NOTES**

### 2. Applicant

The person, company or organisation making the application. (The licensee will be the contractor actually carrying out the disposal activity).

### 3. Agent

Any person, company or organisation involved in the operations. For example, they may be engaged to act under contract or other agreement on behalf of any party listed in the answer to questions 2-4 and having responsibility for the control, management or deposit anywhere below the tidal limit of mean high water springs (MHWS). (e.g. a consultant submitting the application.)

### 4. Details of Current/Previous Licence

Enter the appropriate details for the current sea disposal licence. If you have previously held a licence in respect of this operation, but no current licence exists, please provide the details for the most recently expired licence. If you have no knowledge of any previous licence, please enter "not applicable" (or "N/A").

### 5. Duration of Sea Disposal Operation

Details of the proposed commencement and completion dates of the operation should be included. A licence will normally be valid for 12 months.

### 6. Details of Disposal Vessel(s)

The name, operator and type of vessel being used for the disposal operation should be entered. If vessel details are not available at the time of application, please indicate this on the form as these details will be included within a licence.

### 7. Method Statement

Please include a full method statement of the disposal operation. This should include details of proposed frequency of disposal trips per day, average estimated time from dredge site to licensed sea disposal site.

### 8. Description of Material for Sea Disposal

The applicant should indicate the following:

- Amount of material to be disposed of in metric tonnes. A conversion factor of 1.4 tonnes/m³ should be used for maintenance dredge and capital dredge material.
- Type of Material: whether the material is considered to be 'capital' or 'maintenance'
  - Capital: material from an area to be dredged down to a level not previously dredged during the preceding 10 years.
  - Maintenance: unconsolidated material which has been removed to maintain existing charted depths for navigational purposes.
- Nature of Material. Please provide a description of where the dredge material has originated, e.g. river bed, sea, harbour, approach channel, estuary.
- Description of where the dredged material has originated (Lat/Long, depth of material removed, date last dredged)

### 9. Chemical Analysis of Material to be Disposed of at Sea

Please indicate whether material from the localised area has been chemically analysed within the past 3 years, if yes provide details (locations, dates and laboratory that carried out the analysis). Please provide results on separate sheets. Please note that any delay in providing analysis results is liable to extend the time required to consider your application.

If the material has not been chemically analysed within the previous 3 years, contact should be made with DoE Marine Division. Marine Division will provide details of number of samples to be lifted, sample points and depth of samples. Analysis requirements attached as Appendix I.

### 10. Construction/Land Reclamation Projects

Please indicate in the answer to this question if the deposit of dredgings is associated with any other project involving the placement of material in the sea (e.g. beach nourishment, marine/harbour construction operations, land reclamation, installation of outfalls etc.) If this is the case, please indicate if a separate Marine Construction/Land Reclamation/Beach Replenishment licence application has been made.

### 11. Best Practicable Environmental Option (BPEO)

Please give a very brief summary of the conclusions drawn in the BPEO assessment. Please note that sea disposal licence applications will not be considered unless they are accompanied by such an assessment. All options in the BPEO should be explored fully (as per the guidance document), otherwise your application form and BPEO may be returned to you thereby delaying the processing of the application. See Appendix II for BPEO Assessment and guidance.

### 12. Consultation with Conservation Bodies

Consenting authorities have a duty to ensure that any operations will not have a significant adverse environmental impact, particularly upon designated conservation areas (e.g. Areas of Special Scientific Interest (ASSIs)/Special Area of Conservation (SAC), Special Protection Area (SPA)/RAMSAR sites etc) listed under The Conservation (Natural Habitats, etc.) (Amendment) Regulations (Northern Ireland) 2007. If the applicant (particularly if they have statutory powers for consenting aspects of these works) has already been in consultation with the appropriate nature conservation body – NIEA, Natural Heritage Directorate, please supply any response that they may have given.

### 13. Designated Conservation Areas

Indicate whether the proposed works are located within or close to the boundaries of a conservation area such as an ASSI, SAC, SPA or Ramsar Site.

### 14. Statutory Consenting Powers

Please describe in the answer to this question what (if any) statutory responsibilities you (or your client) have to consent any aspect of the sea disposal operations. This is particularly likely to apply to harbour or local authorities.

### 15. Environmental Assessment

Please indicate whether any environmental assessment has been carried out in respect of the proposed sea disposal operations, either under your own powers or as required by another authority. If such an assessment has been undertaken, please indicate if a copy has been provided with your application. If the statement/assessment has been completed but is not available, please provide an explanation in the box provided.

Additionally please also give detail regarding if and where a copy has been made/is being made available for public inspection.

### 16. Sea Disposal Site

The details of the licensed sea disposal site to be used will be communicated to the licensee by DoE Marine Division in the sea disposal licence.

Should you wish to establish a new site, please provide details in a covering letter with your application and DoE Marine Division will contact you to discuss your proposal before your application is determined. It must be noted that an application to open a

new sea disposal site will not be considered unless sufficient need and reasoning are established for such. It will be preferable on all occasions that an open existing site is used. The cost of any environmental investigations from baseline surveys to identify any new disposal site will normally be the responsibility of the applicant.

### **Other Considerations**

Please ensure that you have:

- Completed all appropriate sections of the application form
- Signed and dated the declaration
- Provided the relevant documentation, charts and continuation sheets and Enclosed the correct payment (refer to fees addendum) or paid by means of BACS (if appropriate)

Otherwise your application will be delayed or returned to you.

### Marine and Coastal Access Act 2009 (Part 4 Marine Licensing)

Application to deposit Solid Waste (e.g. Dredged Material) in the Territorial Sea and UK Controlled Waters Adjacent to Northern Ireland (e.g. from dredging operations.)

It is the responsibility of the applicant to obtain any other consents or authorisations that may be required

Under Part 4 (Chapter 5) of the Marine and Coastal Access Act 2009, information contained within or provided in support of this application will be placed on the public register unless DoE Marine Division (as the licensing authority) approves the applicant's reasons for withholding all or part thereof.

### **Public Register**

Is there any information contained within or provided in support of this application that you consider should not be included on the Public Register on the grounds that its disclosure:

2.	would be contrary to the interests of national security Yes		No		
3.	would prejudice to an unreasonable degree your or some other person's commercial interests or those of a third party? Yes		No		
If <b>Yes</b> , to either (a) or (b), please provide full justification as to why all or part of the information you have provided should be withheld.					

### 1. Project Title

Please give a brief identifiable description, including the location of the works.

Construction of a new multi-purpose facility at D3 for berthing of cruise ships, and for lay-by and transient storage of project cargo, break bulk & dry bulk during cruise ship off-season. Development comprises the construction of 340m long solid quay with mooring dolphins, dredging of the berthing pocket & infilling behind the new quay wall using imported clean fill materials, construction of a 25m wide piled relieving slab along the quay length, with heavy duty paving surfacing on the quay/slab hinterland, access road, security gates, access barrier & kiosk at Airport Road West, modular terminal building, shore side facilities, lighting, fencing, and landscaping. The works are located at D3, within Belfast Harbour Estate, opposite Victoria Terminal 4. Disposal at sea is at the North Channel Disposal Ground.

### 2. Applicant Details

Title (e.g. Mr/Mrs Miss/Dr)	Initials Surname Belfast Harbour Commissioners
Trading title (ifappropriate)	Belfast Harbour Commissioners
Address: (Inc Postcode)	Harbour Office Corporation Street Belfast BT11 3AL
Name of contact: (if different from above)	Eugene McBride
Telephone number: (inc. code)	02890 554422
Email address:	e.mcbride@belfast-harbour.co.uk
Company Registration number	N/A - BHC is a Port Authority

3. Agent Details (if appropriate)					
Title (e.g. Mr/Mrs Miss/Dr)	nitials Surname RPS				
Trading Title (If different from above)	RPS				
Business Address:	Elmwood House, 74 Boucher Road, Belfast BT12 6RZ				
Name of contact: (if different from above)	Sinéad Henry				
Position within company (if appropriate)	Associate				
Telephone number: (inc. code)	02890 667914				
Email address:	sinead.henry@rpsgroup.com				
Company Registration No.	NI20604				
4. Details of Current/Previous Licence					
Licence Reference Number	N/A				
Expiry Date	N/A				
Quantity (metric tonnes) depo					

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### 5. Duration of Sea Disposal Operation

When is the sea disposal operation proposed to commence?

December 2016

When is the sea disposal operation proposed to be completed?

March 2017

### 6. Details of Disposal Vessel(s)

Name of Vessel and Operator (if known)

To be advised upon appointment of Contractor

Type of Vessel

(e.g. Bottom Doors/Split Hopper)

To be advised upon appointment of Contractor

### 7. Method Statement for disposal operation

As part of the D3 scheme, the proposed berthing pocket will be dredged to -9.8mCD. In order to achieve this, approximately 301,000m<sup>3</sup> of material must be removed.

An extensive land and marine-based site investigation was undertaken to inform the design and environmental assessment of the project. Extensive sampling and environmental testing was undertaken within the proposed dredge pocket, in accordance with the DoE Marine Division recommended sampling and testing regime.

The results of the environmental testing of the samples from the proposed dredge pocket showed a localised high TBT reading adjacent to the existing Kinnegar Jetty structure. For the purposes of the EIS, an exercise was undertaken to identify and quantify the worst-possible-case volume of TBT contaminated material within the proposed dredge footprint. This exercise is outlined in detail in Chapter 1 of the EIS. Based on this conservative approach, the volume of TBT contaminated material is estimated to be a maximum of 25,000m<sup>3</sup>.

Prior to commencement of the works, it is intended to undertake further sampling and testing in the area of this result, with the intention of refining and reducing the volume of material assumed to be TBT contaminated.

### Dredging & Disposal Methodology- Uncontaminated Material

It is envisaged that a pontoon mounted backhoe dredger will be used for the dredging of uncontaminated material within the proposed berthing pocket. This material will be loaded into barges and disposed of at the identified sea disposal site, namely North Channel Disposal Ground (within a 0.5 nautical mile radius of 54° 45.3'N 05° 29.6'W). The dredging operation will be a 24/7 operation, with barges continuously travelling to and from the sea disposal site.

### Dredging & Disposal Methodology- Contaminated Material

Dredging of contaminated material will be undertaken using a floating pontoon with an excavator mounted environmental bucket, or crane with a clamshell grab bucket. This method of environmental dredging will minimise the disturbance and escape of material at the seabed and during removal through the water column.

The environmental bucket/clamshell grab limits the potential for dispersion of TBT contaminated material throughout the harbour, as the bucket closes once the material is placed inside and effectively reduces the generation of suspended solids. The dredged material will be loaded onto a barge for transportation to the licensed and planning approved Musgrave TBT disposal area, located in Musgrave Channel within the harbour. No overspill of the barges will be permitted.

The barge will berth alongside Commissioning Quay, where the material will be either craned using a clamshell bucket, or dredge pumped across the Commissioning Quay into the disposal area. It is envisaged that the environmental dredging will be a 12hour day operation.

lf n	If necessary, please continue on a separate sheet and tick this box					
8.	<b>Description of Material for Sea</b> Type of Material (delete as appro		Capital/ <del>Maintena</del>	ince-		
	Amount of Material to be deposite (Volume based on 301,000m³ x 1.9a		571,900T s agreed with DoE N	Marine Division)		
	Nature of Material i.e. River Bed, Sea Harbour, Approach Channel,	Estuary Harbo	our seabed			
	Description of area from where de	redge material has orig	inated			
	Co-ordinates (Lat/Long) or (IGR)	337195, 378300 (Eas	sting and Northing t	o IGR)		
		(Co-ords at centre po	oint of proposed dre	dge pocket)		
	Depth of Material to be Removed	(m)ranges between	en 5-9m depth			
	Date Last Dredged	N/A				
9.	Chemical Analysis of Material					
	Has the material to be disposed of					
	at sea been chemically analysed the previous 3 years? (delete as		es**/ <del>No</del>			
	** If Yes please provide the detail	ls below.				
	Location of sampling for analysis	Refer to sam	oling plans outlined	below:		
	<ul> <li>Surface sample locations sho</li> </ul>	own on drawing IBM0592	-SK-02 Rev A			
	Samples at depth shown on drawing IBM0592-SI-100 Rev H					
	Date analysis carried out	Surface samples tested	I July 2015			
		Samples at depth tester	d Oct 2015-Jan 201	6		
	Laboratory	Surface samples: RPS				
		Samples at depth: Nation	mai Laboratory Serv	/ICE,		

<sup>\*\*</sup>Please attach results to this application

### 10. Construction/Land Reclamation Projects

Do you intend to apply for, or have applied for a marine construction licence as part of the works? (e.g. harbour works, land reclamation, installation of outfalls etc.)				
Yes	<b>✓</b>	No		7

If Yes, please indicate the location of the proposed works and a give a briefdescription below.

The site of the proposed works is at D3, which is located at the northern extent of Belfast Harbour, on the Co. Down side of the Victoria Channel, opposite Victoria Terminal 4. This area is currently designated as operational land and used for open storage and to provide car parking for events. The proposal is to construct a new quay wall, offset approximately 60m out from the existing revetment at D3, towards the navigation channel.

The key marine-based elements comprise:

- Construction of a 340m long steel piled combi-wall, with 2nr 60m long return piled walls to tie into
  existing revetment at D3. A reinforced concrete capping beam will be cast along the top of the steel
  combi-wall, with mooring bollards and fenders cast into the beam at required spacings.
- Imported clean infill material will be used to fill behind the new quay structure, creating circa 4.81acres of land reclamation. This will be suitably compacted during placement.
- A 25m wide reinforced concrete piled relieving slab will be cast along the back of the capping beam.
   This will be buried circa 2m below finished deck level.
- 3nr mooring dolphins will be constructed to the south of the new quay. Each dolphin will consist of steel tubular raking piles and a reinforced concrete pile cap. Steel walkways will be installed between the dolphins, connecting them to the main quay structure.
- Dredging of approximately 301,000m³ of material will be carried out to provide the required berthing
  pocket to a depth of -9.8mCD. In order to facilitate the proposed dredging, existing navigation pile 18
  will be relocated approximately 100m southwards of its current position to remove it from the
  proposed dredge pocket. The controlled removal of Kinnegar Jetty will also be undertaken to facilitate
  the dredging of the required berthing pocket.
- Heavy duty flexible pavement surfacing will be provided across the quay hinterland area. Services such as drainage, water, power and telecoms/CCTV will be provided across the hinterland area.
- 8nr 25m high lattice tower lights will be provided across the quay hinterland area.
- The existing access into D3 will be modified to permit the construction of a vehicular access road to connect the quay hinterland area to Airport Road West. A controlled access barrier and security kiosk will be provided at the entrance to the access road. 8m high street lighting columns will be provided along the access road and around the perimeter of the hinterland area. ISPS (port security) fencing will be installed along the perimeter of the proposed hinterland and access road.
- A modular building will be provided on the quayside for use during the cruise season.

### 11. Best Practicable Environmental Option (BPEO)

### **BPEO Assessment Summary**

An extensive land and marine-based site investigation was undertaken to inform the design and to determine the properties of the material to be dredged, facilitating an assessment for its beneficial re-use.

The results of the site investigation showed that the material to be dredged is predominantly soft alluvium clays and silts. Material of this nature is not suitable for re-use as infill material without extensive geotechnical treatment. It is therefore considered impractical to improve the engineering properties of the material to a level that it is suitable for beneficial re-use.

Another option considered was to bring the dredged material ashore and store for a potential future use within the harbour. This would necessitate double or potentially triple handling which is considered impractical. In addition to this, to store the 301,000m³ of dredge material on the D3 footprint, would necessitate stockpiling circa 2m high. Again, this is not considered feasible.

Historically, sea disposal has been deemed to be the Best Practicable Environmental Option for the dredging of the inner harbour bed sediments.

On the basis of the above, we consider that sea disposal is the BPEO for the material generated by the dredging of the D3 berthing pocket.

### 12. Consultation with Conservation Bodies

Please provide details of any consultation that has taken place with Natural Heritage (NH) of NIEA, and if appropriate include copies of any correspondence with your application. (See Appendix 1)

### 13. Designated Conservation Areas

Are any parts of the sea disposal operations located within the boundaries of a designated conservation area?					
Yes	√ (pSPA not yet designated)	No			
If <b>No</b> , and the boundary of the nearest such site is within 5kilometres, please indicate approximate kms distance of the disposal operation from this boundary.					

## 14. Statutory Consenting Powers Do you, or (if appropriate) your client, have statutory powers to consent any aspect of this project? Yes No √ If Yes, please give details 15. Environmental Assessment Has an environmental assessment been undertaken Yes to support any application in respect of the works. your own statutory powers (if applicable) or any other reason? If Yes, is a copy of the assessment included with this Yes application? If the assessment has been undertaken but has not been included with the application, please provide an explanation below.

	Is the environmental assessment available for public Yes V No I I I I I I I I I I I I I I I I I I			
	If Yes at what locations:			
	The Environmental Statement is available on the Planning Portal (planning reference to be confirmed as soon as possible).			
	The Environmental Statement is also available for viewing and purchase at the Belfast Harbour Commissioners Office, Belfast Harbour, Corporation Street, Belfast BT11 3A			
16	. Sea Disposal Site			
	If you wish to establish a new sea disposal site please indicate here, and Marine Licence will contact you. Otherwise you will be informed of which site should be used and its coordinates.			
	l wish to establish a new sea disposal site Yes No √			
16. Sea Disposal Site  If you wish to establish a new sea disposal site please indicate here, and Naticence will contact you. Otherwise you will be informed of which site should and its coordinates.				

### Declaration

I declare that the information given in this form and related papers is to the best of my knowledge and belief true.

### **WARNING**

It is an offence under the Act under which this application is made to fail to disclose information or to provide false or misleading information.

Signature of applicant: (or agent acting on behalf of applicant)	
Date:	97.03.16
Name (Block Letters):	SINEAD HENRY
Position within company: (if applicable)	ASSOCIATE

PLEASE CHECK CAREFULLY THE INFORMATION YOU HAVE GIVEN AND THAT ALL ENCLOSURES (INCLUDING COPIES) HAVE BEEN INCLUDED

