Mr Patrick O’Neill  
Foreshore Unit  
Department of Environment, Community  
& Local Government  
Newtown Road  
County Wexford  

26th January 2017  
Reg No S0005-02  

Re: Notice of a decision on a dumping at sea permit application in accordance with the Dumping at Sea Acts 1996 to 2009  

Dear Mr O’Neill  

In accordance with the Dumping at Sea Acts as amended, the Agency hereby notifies you of its decision to grant a dumping at sea permit subject to conditions to Department of Defence in respect of Haulbowline, County Cork.  

Please find accompanying a copy of the Agency’s decision.  

All documentation relating to the application is available to view on the Agency’s website at www.epa.ie, including information on public participation and judicial review processes.  

Please use the register number of the dumping at sea permit S0005-02, in any future communication in respect of same. Please address correspondence to the Office of Environmental Enforcement, Environmental Protection Agency, P.O. 3000, Johnstown Castle Estate, Co. Wexford.  

Please note that there is no requirement for you to acknowledge receipt of this letter.  

Yours sincerely  

Grainne Power  
Programme Officer  
Office of Environmental Sustainability  

Encl
Headquarters  
P.O. Box 3000  
Johnstown Castle Estate  
County Wexford  
Ireland

**Dumping at Sea Permit**

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<th>S0005-02</th>
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<td>Permit Holder:</td>
<td>Department of Defence, Haulbowline Naval Base, Haulbowline, Cobh, County Cork.</td>
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<td>Location of Loading:</td>
<td>Haulbowline Naval Base</td>
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<td>Location of Dumping:</td>
<td>Western Celtic Sea, 5.5 km offshore from Power Head, County Cork.</td>
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DUMPING AT SEA ACT 1996 AS AMENDED

DUMPING AT SEA PERMIT

Decision of the Agency, under Section 5(1) of the Dumping at Sea Act 1996 as amended

Reference number: S0005-02

The Agency in exercise of the powers conferred on it by the Dumping at Sea Act 1996 as amended, for the reasons hereinafter set out, hereby grants this dumping at sea permit to the Department of Defence subject to conditions, as set out in the schedule attached hereto.

The permit authorises the loading and dumping at sea of dredged material from Haulbowline Naval Base and Western Celtic Sea subject to conditions.

A copy of the Decision is attached.

Loading and dumping at sea of a substance or material, in accordance with the Dumping at Sea Act 1996 as amended

GIVEN under the Seal of the Agency this 26th day of January 2017.

PRESENT when the seal of the Agency was affixed hereto:

Ms Mary Turner
Authorised Person

[Signature]
INTRODUCTION

This introduction is not part of the permit and does not purport to be a legal interpretation of the permit.

This permit is for the loading of dredged material from the Haulbowline Naval Base in Cork Harbour and the dumping of the material at sea. The dredging activity is not covered by this permit. The Department of Defence was previously granted a Dumping at Sea permit (S0005-01) on 14th December 2010, also for loading and dumping of dredge material at Haulbowline Naval Base. The dumping site is situated approximately 5.5 km offshore and is also authorised for use by another permit holder.

A maximum of 27,200 tonnes of dredged material shall be loaded and dumped at sea under this permit. The permit includes conditions to minimise the release of suspended solids into the water column during the loading activities. Two exclusion zones are specified in the permit from which the loading and dumping of material is prohibited due to elevated concentrations of heavy metals at those locations. The permit holder must manage the loading and dumping activities to ensure the protection of the marine environment. The permit holder is required to submit reports on the loading and dumping activities and monitoring results to the Agency.

The permit sets out in detail the conditions under which the Department of Defence will carry out loading and dumping at sea.
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Glossary of Terms

All terms in this permit should be interpreted in accordance with the definitions in the Dumping at Sea Act 1996 as amended, unless otherwise defined in the section.

Agreement
Agreement in writing.

Annually
All or part of a period of twelve consecutive months.

Application
The application by the permit holder for this permit.

Attachment
Any reference to Attachments in this permit refers to attachments submitted as part of this permit application.

Campaign
A planned period of sustained loading and unloading activity.

CEN
Comité Européen De Normalisation – European Committee for Standardisation.

Chart
Any reference to a chart or chart number means a chart or chart number contained in the application, unless otherwise specified in this permit.

Competent laboratory
A testing facility meeting the general management and technical requirements of EN ISO/IEC-17025 standard, or other equivalent standards accepted at international level and utilising methods of analysis, including laboratory, field, and on-line methods, which are validated and documented in accordance with the above standard(s) for the specific tests.

Day
Any 24 hour period.

Daytime
0700 hrs to 1900 hrs.

Documentation
Any report, record, results, data, drawing, proposal, interpretation or other document in written or electronic form which is required by this permit.

Dumping
(a) any deliberate disposal in the maritime area (including side-cast dredging, plough dredging, water injection dredging and other such dredging techniques) of a substance or material from or in conjunction with a vessel or aircraft or offshore installation,

(b) any deliberate disposal in the maritime area of vessels, aircraft or offshore installations.

Drawing
Any reference to a drawing or drawing number means a drawing or drawing number contained in the application, unless otherwise specified in this permit.

Environmental damage
As defined in Directive 2004/35/EC.

Evening Time
1900 hrs to 2300 hrs.

Exclusion zone
Area where loading and/or dumping at sea is prohibited to protect the marine environment or designated species or sites.

Exclusive economic zone
The outer limit of the exclusive economic zone is the line every point of which lies at a distance of 200 nautical miles from the nearest point of the baseline.
Harbour Authority

As defined in Section 1 of the Dumping at Sea Act 1996 as amended.

HCB

Hexachlorobenzene.

HCH

Hexachlorocyclohexane.

Heavy metals

This term is to be interpreted as set out in "Parameters of Water Quality, Interpretation and Standards" published by the Agency in 2001. ISBN 1-84095-015-3.

Incident

The following shall constitute as incident for the purposes of this permit:

(i) an emergency;

(ii) any loading or dumping at sea activity which does not comply with the requirements of this permit;

(iii) any indication that environmental pollution has, or may have, taken place.

(iv) a complaint of an environmental nature.

Inland waters

All sea areas which lie on the landward side of the baseline of the territorial seas.

Maintain

Keep in a fit state, including such regular inspection, servicing, calibration and repair as may be necessary to perform its function adequately.

Map

Any reference to a map or map number means a map or map number contained in the application, unless otherwise specified in this permit.

Master

The person having the command or charge of the vessel.

Monthly

A minimum of 12 times per year, at intervals of approximately one month.

Monitored Zone

Area which must be monitored for marine mammals by a Marine Mammal Observer.

Night-time

2300 hrs to 0700 hrs.

Noise-sensitive location (NSL)

Any dwelling house, hotel or hostel, health building, educational establishment, place of worship or entertainment, or any other facility or area of high amenity which for its proper enjoyment requires the absence of noise at nuisance levels.

OSPAR

Convention for the Protection of the Marine Environment of the North-East Atlantic.

PAH

Polycyclic aromatic hydrocarbons.

PCB

Polychlorinated biphenyls.

Permit Holder

Department of Defence, Haulbowline Naval Base, Haulbowline, Cobh, County Cork.

Position

Latitude and longitude coordinates in degrees and decimal minutes, based on the WGS 84 datum.
Quarterly

All or part of a period of three consecutive months beginning on the first day of January, April, July or October.

Sample(s)

Unless the context of this permit indicates to the contrary, the term sample(s) shall include measurements taken by electronic instruments.

Slack Water

The state of a tidal current when its speed is near zero, especially the moment when a reversing current changes direction and its speed is zero. The term also is applied to the entire period of low speed near the time of turning of the current when it is too weak to be of any practical importance in navigation. The relation of the time of slack water to the tidal phases varies in different localities.

SOP

Standard operating procedure.

Standard Method

A National, European or internationally recognised procedure (e.g., I.S. EN, ISO, CEN, BS or equivalent); or an in-house documented procedure based on the above references; a procedure as detailed in the current edition of "Standard Methods for the Examination of Water and Wastewater" (prepared and published jointly by A.P.H.A., A.W.W.A. & W.E.F.), American Public Health Association, 1015 Fifteenth Street, N.W., Washington DC 20005, USA; or an alternative method as may be agreed by the Agency.

TBT

Tributyltin.

The Agency

Environmental Protection Agency.

The Maritime Area

Comprises

(i) the inland waters and territorial seas of the State, and the seabed and subsoil beneath them,

(ii) any area for the time being designated by order under section 2 of the Continental Shelf Act 1968 for the purposes of that Act, and the waters above it, and

(iii) the exclusive economic zone of the State.
Decision & Reasons for the Decision

The Environmental Protection Agency is satisfied, on the basis of the information available, that subject to compliance with the conditions of this permit, the loading and dumping activities will comply with and will not contravene any of the requirements of Section 5 of the Dumping at Sea Act 1996 as amended.

The Agency has accordingly decided to grant a permit to Department of Defence, Haulbowline Naval Base, Haulbowline, Cobh, County Cork to carry on the activities listed in Part I Schedule of Activities Permitted, subject to the conditions set out in Part II Conditions.

In reaching this decision the Agency has considered the documentation relating to:
- the application, Register Number: S0005-02 and the supporting documentation received from the applicant;
- the submission(s), comment(s) and observation(s) received;
- the Inspector’s Report dated 13th January 2017;
and has carried out an Appropriate Assessment Screening of the likely significant effects of the permitted activity on European Sites.

A screening for Appropriate Assessment was undertaken to assess, in view of best scientific knowledge and the conservation objectives of the site, if the activity, individually or in combination with other plans or projects is likely to have a significant effect on any European Site. In this context, particular attention was paid to the European Site(s) at Cork Harbour SPA (Site Code: 004030) and Great Island Channel SAC (Site Code: 001058).

The activity is not directly connected with or necessary to the management of any European Site and the Agency considered, for the reasons set out below, that it can be excluded, on the basis of objective information, that the activity, individually or in combination with other plans or projects, will have a significant effect on any European Site and accordingly determined that an Appropriate Assessment of the activity was not required.
- The material to be dumped at sea is clean sediment.
- The loading and dumping activity will take place during a confined period of time, approximately 10 days.
- The proposed activity will use a trailer suction hopper dredger and will not be allowed to overflow.
- A marine mammal observer will be appointed to monitor and record marine mammals in accordance with National Parks and Wildlife guidance during the dumping activity.
- Condition 1.5 and Schedule C.1.2: Marine Mammal Monitoring of this permit require the applicant to ensure that a marine mammal observer be appointed to monitor and record marine mammals in accordance with National Parks and Wildlife guidance.
Part I Schedule of Activities Permitted

In pursuance of the powers conferred on it by the Dumping at Sea Act 1996 as amended, the Environmental Protection Agency (the Agency), under Section 5 of the said Acts, grants this Dumping at Sea Permit to the Department of Defence, Haulbowline Naval Base, Haulbowline, Cobh, County Cork. The permit authorises the loading and dumping at sea activities, subject to conditions listed in Part II, with the reasons therefor and the associated schedules attached thereto.

Part II Schedule of Activities Refused

None of the proposed activities as set out in the licence application have been refused.
Part III Conditions

Condition 1. Scope

1.1 Statutory Obligations

1.1.1 This permit is for the purposes of loading and dumping at sea under the Dumping at Sea Act 1996 as amended, only and nothing in this permit shall be construed as negating the permit holder’s statutory obligations or requirements under any other enactments or regulations.

1.1.2 This permit may be technically amended, as and when considered necessary by the Agency.

1.2 The material or substance to which this permit relates shall be dredged material loaded from that part of the sea specified in Schedule A: Limitations, of this permit.

1.3 For the purposes of this permit, the location of the loading area(s) authorised by this permit is in those parts of the sea outlined in red on Drawing No. 02: Dumping at Sea Application Loading Areas Location of the application and bounded by the coordinates specified in the Section 5(2) response dated 9th November 2016. Any reference in this permit to “loading area(s)” shall mean the area(s) thus outlined. The permitted loading activity shall be carried on only within the area(s) outlined.

1.4 For the purposes of this permit, the location of the dumping site(s) is in that part of the sea bounded by the coordinates specified in Schedule A: Limitations of this permit. Any reference in this permit to “dumping site” shall mean the area(s) thus outlined. The permitted dumping activity shall be carried on only within the area(s) outlined.

1.5 For the purposes of this permit, the location of the exclusion zone authorised by this permit is in that part of the sea specified in Schedule A.3: Exclusion Zones.

1.6 The Monitored Zone for marine mammals authorised by this permit is the area within a 500m radial distance of the loading activity.

1.7 Loading and dumping at sea shall be limited as set out in Schedule A: Limitations of this permit.

1.8 Loading and dumping at sea shall be controlled and operated as set out in the permit. All programmes required to be carried out under the terms of this permit become part of this permit.

1.9 No change to the loading and dumping activities authorised by this permit shall be carried out or commenced without the prior written agreement of the Agency.

Reason: To clarify the scope of this permit.
Condition 2. Management of the loading and dumping at sea activities

2.1 The permit holder shall ensure that all or any of the following:
   - litter
   - man-made debris
   - odour

   associated with, or arising from, the permitted activities do not result in an impairment of, or an interference with, amenities or the environment.

2.2 The permit holder shall ensure that personnel performing specifically assigned tasks shall be qualified on the basis of appropriate education, training and experience as required and shall be aware of the requirements of this permit.

2.3 The permit holder shall ensure that a nominated, suitably qualified and experienced person is present at all times when activities covered by this permit are ongoing.

2.4 The permit holder shall notify the Agency at least fourteen calendar days prior to the commencement of the loading and dumping activities, by webform or by such other means as may be specified by the Agency.

2.5 Documentation

   The permit holder shall issue a copy of this permit to all relevant personnel whose duties relate to any condition of this permit.

2.6 Corrective Action

   The permit holder shall initiate an investigation and corrective action in the event of a reported non-conformity with this permit to the satisfaction of the Agency.

2.7 Communications Programme

   2.7.1 The permit holder shall, within one month of the date of grant of this permit, establish, maintain and implement a Public Awareness and Communication Programme to ensure members of the public can obtain information at reasonable times, concerning the environmental performance of the permitted activity.

Reason: To make provision for management of the loading and dumping at sea activities on a planned basis having regard to the desirability of ongoing assessment, recording and reporting of matters affecting the marine environment.
Condition 3. Loading and dumping at sea activities

3.1 All loading and dumping activities shall not commence before 1st February 2017.
3.2 All loading and dumping activities shall be completed by 31st July 2017.
3.3 No material shall be dumped at sea which has been categorised as unsuitable for disposal.
3.4 Dumping shall be effected by release of the material through the hull of the vessel while the vessel is in motion.
3.5 Loading shall be carried out by trailing suction hopper dredger, unless otherwise agreed by the Agency in accordance with Condition 1.9.
3.6 The permit holder shall take all reasonably practicable measures to limit the release of suspended solids into the water column during loading and on voyages to and from the dumping site.
3.7 Dumping activities shall be conducted to ensure a uniform spread of material throughout the dumping site(s).
3.8 The permit holder shall liaise with the Harbour Master at the Port of Cork Company prior to the commencement of and during the loading and dumping activities.
3.9 The permit holder shall ensure that no sitation of the Cobh Turning Circle occurs as a result of the loading and dumping activities.
3.10 Information relating to the activity shall be automatically recorded during each dumping voyage and shall as a minimum contain details of the following:
   (i) The name of the vessel;
   (ii) The source of the substance or material;
   (iii) The date, time, location and position at which the voyage for the purposes of dumping began;
   (iv) The date, time and position at which dumping began;
   (v) The date, time and position at which dumping ended;
   (vi) The quantity, stated in metric tonnes, of the substance or material dumped;
   (vii) The date, time and position at which the vessel completed the voyage for the purpose of dumping; and
   (viii) Logged vessel track record data.
3.11 Prior to the commencement of the permitted activity, the permit holder shall consult with the Marine Survey Office of the Department of Transport to ensure that all vessels used in connection with the loading and dumping activity specified in this permit meet the requirements of the Marine Survey Office. The permit holder shall ensure that the vessels used in connection with this permit are fully certified for the entire period of loading and dumping activities specified in this permit.
3.12 The permit holder shall permit authorised officers to be on board the vessel. They shall permit and facilitate the carrying out by the authorised officer of his functions under the Dumping at Sea Act 1996 as amended, and shall comply with the provisions of those Acts in relation to the authorised officer and those functions.
3.13 The permit holder shall ensure that material from sediment sampling locations HA5, HA6, HA11 and NV5, specified in the information received as part of the application on 18th October 2016, be loaded and dumped first and overlain without delay with cleaner material from the other permitted areas in the naval basin.
3.14 Dumping shall be prohibited at the dump site during the herring spawning times in February in accordance with Schedule A.4: Closed Periods of this permit.
3.15 Material loaded from those areas specified in Condition 3.13 and from areas within a distance of 10m of the Exclusion Zones specified in Schedule A: Limitations of this permit shall be dumped at slack water only.
Reason: To provide for appropriate controls on loading and dumping at sea activities to ensure the protection of the marine environment.

Condition 4. Control and Monitoring

4.1 The permit holder shall carry out such sampling, analyses, measurements, examinations, maintenance and calibrations as set out below and in accordance with Schedule C: Monitoring, of this permit.

4.1.1 Analyses and measurements shall be undertaken by competent staff in accordance with documented operating procedures.

4.1.2 Such procedures shall be assessed for their suitability for the test matrix and performance characteristics shall be determined.

4.1.3 Such procedures shall be subject to a programme of Analytical Quality Control using control standards with evaluation of test responses.

4.1.4 Analysis for compliance purposes, including any sub-contracted analysis, shall be done by a competent laboratory.

4.2 The permit holder shall ensure that:

(i) sampling and analysis for all parameters listed in the schedules of this permit, and
(ii) any reference measurements for the calibration of automated measurement systems;

shall be carried out by an appropriate Standard Method.

4.3 The frequency, methods and scope of monitoring, sampling and analyses, as set out in this permit, may be amended with the agreement of the Agency following evaluation of test results.

4.4 Bathymetry

4.4.1 The permit holder shall conduct a pre-loading and post-loading bathymetric survey of the loading areas specified in Schedule A: Limitations of this permit and up to and including the Cobh Turning Circle, in accordance with Schedule C: Monitoring of this permit.

4.4.2 Where siltation of the Cobh Turning Circle or its side slopes has occurred, the permit holder shall demonstrate to the Agency the remediation of the affected areas to pre-loading conditions. A report on any such remediation shall be included as part of the Final Environmental Report.

4.4.3 The permit holder shall carry out pre-dredge and post-dredge bathymetric surveys of the Damping Site(s) in accordance with Schedule C.2: Monitoring at Dumping at Sea of this permit.

4.5 Archaeology

4.5.1 The permit holder shall notify the Underwater Archaeology Unit of the Department of Arts, Heritage and the Gaeltacht prior to the commencement of the permitted loading and dumping activity.

4.5.2 The permit holder shall comply with the archaeological monitoring requirements of the Underwater Archaeology Unit of the Department of Arts, Heritage and the Gaeltacht.

4.5.3 Should potential archaeology be impacted during the course of the permitted activities, the monitoring archaeologist shall be empowered to have the dredging stopped in that area until the Underwater Archaeology Unit of the Department of Arts, Heritage and the Gaeltacht has been informed and the potential archaeology has been evaluated.
4.5.4 The permit holder shall immediately notify the Underwater Archaeology Unit of the Department of Arts, Heritage and the Gaeltacht if any material of archaeological potential is encountered during the course of the permitted activities.

4.6 Marine Mammals

4.6.1 Prior to commencement of each loading and dumping campaign, an appropriately qualified Marine Mammal Observer shall undertake survey work to ensure that the Monitored Zone specified in Condition 1.5 is clear of marine mammals.

4.6.2 Sound-producing activity shall not commence until at least thirty minutes have elapsed with no marine mammal detections in the Monitored Zone.

4.6.3 Loading activity may continue if marine mammals enter the Monitored Zone following operational start-up.

4.6.4 Marine mammals should not be harassed or chased from the Monitored Zone. The use of acoustic deterrent devices is not permitted.

4.6.5 The Marine Mammal Observer shall meet the monitoring and reporting requirements of the National Parks and Wildlife Service. Full reporting on MMO operations and mitigation undertaken should be made to offshore@ahp.gov.ie within 1 month of completion of each campaign.

4.7 Where relevant ambient monitoring results are available from any other statutory body, including the Agency, the permit holder may submit those results to contribute to the fulfilment of the requirements of Schedule B: Monitoring of this permit.

Reason: To provide for the protection of the marine environment by way of monitoring of the impacts associated with the loading and dumping at sea activities.
Condition 5. Incident Prevention and Emergency Response

5.1 Incidents

In the event of an incident the permit holder shall immediately:

(i) identify the date, time and place of the incident;
(ii) as soon as practicable notify the Agency, in a format prescribed, and other relevant authorities;
(iii) carry out an investigation to identify the nature, source and cause of the incident and any impact arising therefrom;
(iv) isolate the source of any such impact;
(v) evaluate the environmental pollution, if any, caused by the incident; and
(vi) identify and execute measures to minimise the impact and the effects thereof.

5.2 The permit holder shall provide a report of the investigation into the incident to the Agency for its agreement within one month of the incident occurring or as otherwise agreed by the Agency. The report shall include a proposal to:

(i) identify and put in place measures to avoid recurrence of the incident.

5.3 The permit holder shall, in advance of the commencement of the activities, ensure that a documented Accident Prevention Procedure is in place that addresses hazards, particularly in relation to the prevention of accidents with a possible impact on the environment.

5.4 The permit holder shall, in advance of the commencement of the activities, ensure that a document Emergency Response Procedure is in place that addresses any emergency situation which may arise. This procedure shall include provision for minimising the effects of any emergency on the environment.

Reason: To provide for the protection of the marine environment.
Condition 6. Notification, Records and Reports

6.1 The permit holder shall notify the Agency by webform, or by any other means as may be specified by the Agency, as soon as practicable after the occurrence of any incident. The permit holder shall include as part of the notification, the date and time of the incident, summary details of the occurrence, and where available, the steps taken to minimise any impacts.

6.2 In the case of any incident relating to any impact on water, the permit holder shall notify the Marine Institute, Sea Fisheries Protection Authority, Inland Fisheries Ireland, Bord Iascaigh Mhara and any other relevant authorities as soon as practicable after such an incident.

6.3 In the case of any incident relating to archaeology, marine mammals or migratory fish, the permit holder shall notify the National Parks and Wildlife Service, Marine Institute, Sea Fisheries Protection Authority and Inland Fisheries Ireland and any other relevant authorities as soon as practicable after such an incident.

6.4 The permit holder shall make a record of any incident. This record shall include details of the nature, extent, and impact of, and circumstances giving rise to, the incident. The record shall include all corrective actions taken to manage the incident, and the effect on the marine environment, and avoid recurrence. The permit holder shall, as soon as practicable following incident notification, submit to the Agency the incident record.

6.5 The permit holder shall record all complaints related to the loading and dumping activities. Each such record shall give details of the date and time of the complaint, the name of the complainant (if provided), and give details of the nature of the complaint. A record shall be kept of the response made and any corrective action undertaken in the case of each complaint. This record shall be made available to the Agency upon request.

6.6 The permit holder shall as a minimum keep the following documents:

(i) the permit(s) relating to the dumping site(s);
(ii) the Final Environmental Report for the dumping site(s);
(iii) records of all sampling, analyses, measurements, examinations, calibrations and maintenance carried out in accordance with the requirements of this permit and any previous permits dating back at least three years;
(iv) all correspondence with the Agency;
(v) complaints register; and
(vi) up to date drawings/plans showing the location of the loading area or areas, the dumping site(s) and exclusion zone(s) authorised by this permit.

This documentation shall be available to the Agency for inspection at all reasonable times and shall be submitted to the Agency, as required, in such a format as may be requested, including electronic submittal of the information or a summary of such information.

6.7 The permit holder shall submit electronically to the Agency a Final Environmental Report within 3 months of completion of the loading and dumping activities. This report shall include as a minimum the information specified in Schedule D: Final Environmental Report of this permit and shall be prepared in accordance with any relevant guidelines issued by the Agency or as otherwise prescribed by the Agency.

6.8 A full record, which shall be open to inspection by authorised officer of the Agency at all times, shall be kept by the permit holder on matters relating to each load of the substance or material intended to be dumped, and put on board the vessel. This record shall be maintained continually and shall as a minimum contain those details specified in Condition 3.10 of this permit. This information shall be submitted as required by and as may be prescribed by the Agency as part of the Final Environmental Report and immediately on request by an authorised officer.
6.9  All reports shall be certified accurate and representative by the permit holder, manager or a nominated, suitably qualified and experienced deputy.

6.10 The permit holder shall notify the Agency in writing upon completion of the loading and dumping activities to which this permit relates.

Reason: To provide for the collection and reporting of adequate information on the loading and dumping at sea activity.

Condition 7. Financial Charges

7.1 Agency Charges

7.1.1 The permit holder shall pay to the Agency a contribution or such sum, as the Agency from time to time determines having regard to variations in the extent of reporting, auditing, inspections, sampling and analysis or other functions carried out by the Agency, towards the cost of monitoring the activities as the Agency considers necessary for the performance of its functions under the Dumping at Sea Act 1996 as amended.

7.1.2 The cost of any other tests, sampling, analysis and monitoring which the Agency may require in relation to the loading and dumping of the substance or material the subject of this permit shall be borne by the permit holder. Furthermore, the cost of any tests, sampling, analysis and monitoring surveys carried out by an authorised officer or by or on behalf of the Agency in relation to the sampling of a substance or material the subject of this permit shall also be borne by the holder of the permit.

7.2 The Permit Holder shall indemnify the Agency and its authorised officers against all cost occurred by him as a result of a breach of any of the conditions of this permit.

Reason: To provide for adequate financing for monitoring to protect the marine environment.
SCHEDULE A: Limitations

A.1 Quantity of Dredged Material to be Dumped at Sea

<table>
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<tr>
<th>Dredged Material</th>
<th>Maximum daily rate of disposal (m³)</th>
<th>Total maximum quantity (tonnes, wet weight)</th>
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<tr>
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<td>10,000</td>
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A.2 Location of Dumping Site(s)

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<th>Dumping Site</th>
<th>Latitude</th>
<th>Longitude</th>
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<tr>
<td></td>
<td>(i) 51°43.00</td>
<td>8°10.18</td>
</tr>
<tr>
<td></td>
<td>(ii) 51°43.00</td>
<td>8°09.00</td>
</tr>
<tr>
<td></td>
<td>(iii) 51°44.50</td>
<td>8°09.00</td>
</tr>
<tr>
<td></td>
<td>(iv) 51°44.50</td>
<td>8°10.18</td>
</tr>
</tbody>
</table>

A.3 Exclusion Zones

<table>
<thead>
<tr>
<th>Exclusion zone 1</th>
<th>Latitude</th>
<th>Longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(i) 51°50.565045</td>
<td>8°18.028331</td>
</tr>
<tr>
<td></td>
<td>(ii) 51°50.579884</td>
<td>8°18.003244</td>
</tr>
<tr>
<td></td>
<td>(iii) 51°50.562657</td>
<td>8°17.971093</td>
</tr>
<tr>
<td></td>
<td>(iv) 51°50.535783</td>
<td>8°18.023165</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Exclusion zone 2</th>
<th>Latitude</th>
<th>Longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(i) 51°50.473134</td>
<td>8°17.877090</td>
</tr>
<tr>
<td></td>
<td>(ii) 51°50.463919</td>
<td>8°17.874504</td>
</tr>
<tr>
<td></td>
<td>(iii) 51°50.446986</td>
<td>8°17.875176</td>
</tr>
<tr>
<td></td>
<td>(iv) 51°50.443906</td>
<td>8°18.026280</td>
</tr>
<tr>
<td></td>
<td>(v) 51°50.454530</td>
<td>8°18.025654</td>
</tr>
<tr>
<td></td>
<td>(vi) 51°50.455551</td>
<td>8°17.942264</td>
</tr>
<tr>
<td></td>
<td>(vii) 51°50.473604</td>
<td>8°17.925582</td>
</tr>
</tbody>
</table>

A.4 Closed Periods

<table>
<thead>
<tr>
<th>Applicable Timeframe</th>
<th>Prohibited Activity</th>
<th>Reason for closed period</th>
</tr>
</thead>
<tbody>
<tr>
<td>February</td>
<td>All dumping activity at the Dumping Site.</td>
<td>Herring spawning times.</td>
</tr>
</tbody>
</table>
SCHEDULE B: Emission Limits

There shall be no noise emissions of environmental significance.
SCHEDULE C: Monitoring

C.1 Monitoring at Loading Area *Note 1*

Note 1: The frequency, methods and scope of monitoring, sampling and analyses may be amended in accordance with Condition 4.3.

C.1.1 Bathymetry Monitoring

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Monitoring Frequency/Time</th>
<th>Monitoring Locations</th>
<th>Analysis Method/Technique</th>
</tr>
</thead>
</table>
| Bathymetry & concurrent tide observations | • Within one week prior to the commencement of each loading campaign.  
• Within one week following completion of each loading campaign | Loading Areas  
Cobh Turning Circle | High resolution bathymetric survey and concurrent tidal height measurements. |

C.1.2 Marine Mammal Monitoring

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Monitoring Frequency/Time</th>
<th>Monitoring Locations</th>
<th>Analysis Method/Technique</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marine mammals</td>
<td>• Duration of the loading activities</td>
<td>Loading Areas</td>
<td>Monitoring to be undertaken by an independent Marine Mammal Observer with relevant experience</td>
</tr>
</tbody>
</table>

C.2 Monitoring at Dumping Site *Note 1*

Note 1: The frequency, methods and scope of monitoring, sampling and analyses may be amended in accordance with Condition 4.3.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Monitoring Frequency/Time</th>
<th>Monitoring Locations</th>
<th>Analysis Method/Technique</th>
</tr>
</thead>
</table>
| Bathymetry & concurrent tide observations | • Within one week prior to the commencement of each loading campaign.  
• Within one week following completion of each loading campaign | Dumping Site          | High resolution bathymetric survey and concurrent tidal height measurements. |
C.2.1 Marine Mammal Monitoring

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Monitoring Frequency/Time</th>
<th>Monitoring Locations</th>
<th>Analysis Method/Technique</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marine mammals</td>
<td>• Duration of the dumping activities</td>
<td>Dumping Site</td>
<td>Monitoring to be undertaken by an independent Marine Mammal Observer with relevant experience.</td>
</tr>
</tbody>
</table>

SCHEDULE D: Final Environmental Report

<table>
<thead>
<tr>
<th>Final Environmental Report Content^Note 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Register/log of loading and dumping activities.</td>
</tr>
<tr>
<td>OSPAR dumping report.</td>
</tr>
<tr>
<td>Marine positional log.</td>
</tr>
<tr>
<td>Reported incidents summary.</td>
</tr>
<tr>
<td>Complain summary.</td>
</tr>
<tr>
<td>Monitoring Summary.</td>
</tr>
<tr>
<td>Accident Prevention Procedure.</td>
</tr>
<tr>
<td>Emergency Response Procedure.</td>
</tr>
<tr>
<td>Any other items specified by the Agency.</td>
</tr>
</tbody>
</table>

^Note 1: Content may be revised subject to agreement of the Agency.

Sealed by the seal of the Agency on this day the 26th January 2017.

PRESENT when the seal of the Agency
Was affixed here to:

Mr. Mary Turner
Authorised Person