Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended) Consent Decision

Title: Thanckes Oil Fuel Depot Loading Facility and Tank Farm Fire Fighting Upgrade

Operator: Defence Infrastructure Organisation

Reference: MLA/2015/00215

Contents

Contents ................................................................................................................................. 1
1. Executive Summary ........................................................................................................ 2
   1.1 Decision ...................................................................................................................... 2
2. Legal and Policy Framework .......................................................................................... 2
3. Timeline .......................................................................................................................... 3
4. Application Details ........................................................................................................ 3
   4.1 Aspects of the scheme requiring a marine licence ....................................................... 4
5. Consultation Exercise .................................................................................................... 4
   5.1 Public Consultation ................................................................................................... 4
   5.2 Consultees .................................................................................................................. 5
6. Evaluation ....................................................................................................................... 5
   6.1 Water, Contamination and Sediment Quality ............................................................. 6
      6.1.1 Contaminated Sediment ...................................................................................... 6
      6.1.2 Pollution Prevention Guidelines .......................................................................... 6
      6.1.3 Groundwater Protection .................................................................................... 7
   6.2 Ecology ....................................................................................................................... 7
      6.2.1 Ostrea edulis ........................................................................................................ 8
      6.2.2 Sternapssis scutata ............................................................................................. 8
      6.2.3 Benthic ecology sampling .................................................................................... 8
      6.2.4 Disturbance to migratory fish ............................................................................. 9
1. Executive Summary

This report contains the environmental impact assessment (EIA) consent decision for the Thanckes Oil Fuel Depot Loading Facility and Tank Farm Fire Fighting Upgrade (the project). Defence Infrastructure Organisation (the applicant) has applied for a marine licence under Part 4 of the Marine and Coastal Access Act 2009.

This report describes the project, details the analysis of the consultation and responses received, and records the Marine Management Organisation’s (MMO) conclusions about the potential environmental impacts of the project.

1.1 Decision

The MMO has completed a comprehensive review of the project from a marine environment perspective in the context of earlier consideration of the terrestrial aspects.

The MMO has concluded that the mitigation strategies contained in the Environmental Statement (ES) are sufficient to minimise potential impacts associated with the construction and operational phases of the project, such that they are within acceptable limits. The MMO is satisfied that, where necessary and appropriate, additional controls will be applied through conditions on the marine licence.

2. Legal and Policy Framework

The legal framework for the EIA consent decision is provided by:

- Council Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment (the EIA Directive). This aims to protect the environment and the quality of life by ensuring that projects which are likely to have significant environmental effects by virtue of their nature, size or location are subject to an environmental impact assessment before permission is granted.
• The Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended) (the MWR) which transpose the EIA Directive into UK law for marine licence applications.

When considering the project the MMO also had regard to policy documents and guidance. This included, but was not limited to, the Marine Policy Statement.

3. Timeline

On 21 December 2012 the applicant submitted a scoping request to the MMO (MMO ref: MLP/2012/00326).

A response, detailing the recommended scope of the assessment, was issued to the applicant on 27 March 2013.

On 8 May 2015, the applicant submitted an application for a marine licence to the MMO enclosing an Environmental Statement (ES) for the project (MMO ref: MLA/2015/00215).

4. Application Details

The provision of fuels and waste disposal services is a fundamental requirement of the Royal Navy and other customers operating within the HMNB Devonport.

In 1998, it was discovered that the steel piles supporting Yonderberry Jetty were suffering from accelerated low water corrosion. A major refurbishment was undertaken the following year in order to expand the jetty structure’s operational life.

The resulting project objectives are:
- to provide a loading facility suitable for ship to shore receipt and delivery of fuels, waste products and fresh water at Thanckes Oil Fuel Depot (OFD);
- to provide a site-wide fire-fighting capability for Thanckes OFD that meets current requirements;
- to provide facilities with a minimum service life of 40 years that meet all current legislation and user requirements; and
- to comply with Ministry of Defence (MOD) policy and best practice.

The replacement jetty will be designed to accommodate vessels of up to 50,000 tonne displacement and 235m length and provide a minimum maintained dredge depth of 11.6m. This ensures current and currently projected operational requirements of the MOD for Yonderberry Jetty can be fulfilled upon completion of the project.

The ES assessed the proposed disposal of dredged material at Rame Head South disposal site (PL031). However, during the determination period a new disposal site in the Plymouth Sound area was characterised. The site, Plymouth Deep (PL035), was fully
assessed for the disposal of capital and maintenance material. PL035 was selected as the disposal site for this application by the MMO as best site in terms of the practical, economic and environmental costs. It is considered that as both PL031 and PL035 are designated disposal sites within the same area, and potential impacts were identified during characterisation, the change of disposal site is not significantly different from what was assessed in the ES.

4.1 Aspects of the scheme requiring a marine licence

Marine licensable activities associated with this project are:

- construction of the new jetty head and jetty approach;
- capital dredging and disposal; and
- deconstruction of the existing jetty.

The works also include aspects above Mean High Water Springs, relating to the Tank Farm Fire Fighting Upgrade. These activities would not require a marine licence.

5. Consultation Exercise

This section summarises consultation undertaken by the MMO in relation to the project.

5.1 Public Consultation

The MMO instructed the applicant to place a public notice in two newspapers for two consecutive weeks in accordance with Regulation 16(1) (b) or the MWR. The public notice contained details of:

- the applicant’s name and address;
- the application for a marine licence and that this application was subject to EIA;
- a statement of the nature, size and location of the project;
- the address details of the applicant, where copies of the application and ES could be inspected during office hours;
- the address details of both the MMO and the applicant, at which copies of the application and ES could be obtained; and
- notice that parties could make representations within 42 days of the first notice date.

The above details were advertised in the Western Morning News on 6 October 2015 and 13 October 2015 and the Plymouth Herald on 6 October 2015 and 13 October 2015.

In addition, and in accordance with Regulation 16(1) (a) (ii) of the MWR, the MMO published the application documents, including the ES, on the MMO Public Register.

No responses were received from the public as a result of this consultation.
5.2 Consultees

In addition to the public consultation outlined in paragraph 5.1 the MMO consulted bodies it considered may have an interest in the project. Those consulted are identified in Table 1. Where relevant, their responses have been detailed in section 6: Evaluation.

Table 1 - Consultation bodies

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Response received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centre for Environment, Fisheries and Aquaculture Science (Cefas)</td>
<td>Yes</td>
</tr>
<tr>
<td>Natural England</td>
<td>Yes</td>
</tr>
<tr>
<td>Environment Agency</td>
<td>Yes</td>
</tr>
<tr>
<td>Historic England</td>
<td>Yes</td>
</tr>
<tr>
<td>MMO South Western Coastal Office</td>
<td>Yes</td>
</tr>
<tr>
<td>Trinity House</td>
<td>Yes</td>
</tr>
<tr>
<td>The Crown Estate</td>
<td>Yes</td>
</tr>
<tr>
<td>Ministry of Defence</td>
<td>Yes</td>
</tr>
<tr>
<td>Cornwall Inshore Fisheries and Conservation Authorities (IFCA)</td>
<td>Yes</td>
</tr>
<tr>
<td>Devon and Severn Inshore Fisheries and Conservation Authorities (IFCA)</td>
<td>Yes</td>
</tr>
<tr>
<td>Royal Yachting Association</td>
<td>Yes</td>
</tr>
<tr>
<td>Cornwall County Council</td>
<td>Yes</td>
</tr>
<tr>
<td>Plymouth City Council</td>
<td>Yes</td>
</tr>
<tr>
<td>Queens Harbour Master</td>
<td>Yes</td>
</tr>
<tr>
<td>Maritime and Coastguard Agency</td>
<td>Yes</td>
</tr>
<tr>
<td>Cornwall Area of Outstanding Natural Beauty (AONB)</td>
<td>Yes</td>
</tr>
<tr>
<td>Tamar Valley Area of Outstanding Natural Beauty (AONB)</td>
<td>Yes</td>
</tr>
<tr>
<td>Duchy of Cornwall</td>
<td>Yes</td>
</tr>
<tr>
<td>United Kingdom Hydrographic Office (UKHO)</td>
<td>Yes</td>
</tr>
</tbody>
</table>

After the initial consultation period, further targeted consultation with specific bodies was undertaken to resolve specific issues raised in primary consultation and throughout the decision making process.

6. Evaluation

The following section includes a summary of the key considerations of impacts as a result of the proposed works. This section only details areas of the ES where there were representations made during consultation with the bodies listed in Section 5.2 above, and the correspondence undertaken to resolve these issues. Any conclusions held within
sections of the application and supporting ES, where no representations were received, were reviewed and considered by the MMO to be appropriate. The subjects of all representations received by the MMO are detailed in the paragraphs below.

### 6.1 Water, Contamination and Sediment Quality

The ES considers the impacts of disturbance of sediment and piling activities, the use and storage of contaminating substances, sediment run-off from land, waste soil/sediment, and the potential for hazardous substances or waste materials to enter the watercourse.

The ES concludes that, subject to the mitigation measures suggested, the activities will pose no more than a slight negative effect on the marine environment. In some cases a positive effect in reducing the potential risk to the environment was identified.

Representations regarding water, contamination and sediment quality were received from Natural England, the Environment Agency, the Centre for Environment, Fisheries and Aquaculture Science (Cefas), and Cornwall County Council.

#### 6.1.1 Contaminated Sediment

Representations were submitted to the MMO from Natural England, the Environment Agency, and Cefas. Concerns raised were the lack of mitigation suggested for disturbance of contaminated sediments associated with piling and dredging activities.

The mitigation proposed in the application was the production of a Construction Environmental Management Plan (CEMP), to be prepared and agreed before works could start.

The MMO notes that this mitigation was included within the ES, and has been included as a condition on the marine licence (See Section 8.1). However, due to the concerns raised about the range of subjects included within the CEMP, the MMO has conditioned that prior to the submission of the CEMP; its scope must be agreed with the MMO in consultation with Natural England, the Environment Agency, and Cefas.

In addition to conditioning the mitigation presented in the ES, Cefas requested that the remobilisation of contaminated sediments through dredger hopper discharge overflow be prevented. A condition has been added to the marine licence (see Section 8.1).

#### 6.1.2 Pollution Prevention Guidelines

Natural England’s comments detailed that the Environment Agency Pollution Prevention Guidelines should be adhered to at all times.

Pollution Prevention Guidelines have now been withdrawn from use and so this has not been included on the marine licence. However, the marine licence will include appropriate conditions to minimise the risk of pollution incidents.
6.1.3 Groundwater Protection

The Environment Agency requested that the following condition be added to the marine licence:

‘If, during development, contamination not previously identified is found to be present at the site then no further development (unless otherwise agreed in writing with the local planning authority) shall be carried out until the developer has submitted a remediation strategy to the local planning authority detailing how this unsuspected contamination shall be dealt with and obtained written approval from the local planning authority. The remediation strategy shall be implemented as approved.’

This condition relates to consents to be provided by the local planning authority. The condition has been included in the Conditional Planning Permission issued by Cornwall Council (PA15/04438) and so has not been included on the marine licence.

6.2 Ecology

The ES considers the impacts of the project on terrestrial and marine ecology. Key ecological receptors were identified, including the features of the following designated sites:

- Plymouth Sound and Estuaries Special Area of Conservation (SAC)
- Tamar Estuaries Complex Special Protection Area (SPA)
- Dartmoor SAC
- Lynher Estuary Site of Special Scientific Interest (SSSI)
- St John’s Lake SSSI
- Tamar-Tavy Estuary SSSI
- Plymouth Sound Shores and Cliffs SSSI
- Mount Wise SSSI
- Western King SSSI
- Richmond Walk SSSI
- Kingsand to Sandway Point SSSI
- Tamar Estuary Marine Conservation Zone (MCZ)
- Rame Head and Whistand Bay SSSI
- Whitsand and Looe Bay SSSI
- Woodland Wood Valley Local Nature Reserve (LNR)
- Budshead Wood LNR

Other receptors identified include: non-statutory designated sites; terrestrial plants and habitats; invasive plants; terrestrial invertebrates; amphibians; reptiles; breeding birds; otters; bats; dormice; badgers and marine habitats.

The ES concludes that, given the mitigation measures suggested, no significant effects on any ecological receptors are anticipated as a result of the project.

Representations regarding ecology were received from Natural England, the Environment
Agency, the Centre for Environment, Fisheries and Aquaculture Science (Cefas) and Cornwall County Council.

6.2.1 *Ostrea edulis*

Cefas noted that a specimen of the oyster *Ostrea edulis* was sampled during the subtidal survey but had been screened out of assessment. Further justification for this was requested.

On the 9 December 2015, a letter requesting further assessment was sent to Arcadis Consultancy UK Limited (Annex 1). On the 7 January 2016 a response to this letter was issued by Arcadis Consultancy UK Limited to the MMO (Annex 2). Cefas were consulted again and a response from Cefas was received on the 15 February 2016.

With regard to the information provided in these responses, the MMO considers that one instance of an unattached oyster will not require further assessment. This would not be proportionate to the risk identified, considering the high probability the specimen originated from the oyster beds upstream.

6.2.2 *Sternapsis scutata*

Cefas noted that *Sternapsis scutata* was sampled during the subtidal survey, and scoped into further assessment but had not been mentioned. Further justification for this was requested.

On the 9 December 2015, a letter requesting further assessment was sent to Arcadis Consultancy UK Limited (Annex 1). On the 7 January 2016 a response to this letter was issued by Arcadis Consultancy UK Limited to the MMO (Annex 2). Cefas were consulted again and a response from Cefas was received on the 15 February 2016.

With regard to the information provided in these responses, the MMO considers that the effect on this species is being suitably dealt with under the context of the Plymouth Sound and Estuaries Special Area of Conservation.

6.2.3 Benthic ecology sampling

Cefas advised that there appeared to be a lack of benthic sampling stations to the southern area of the development, as well as a lack of justification for the numbers and locations of the sampling sites.

On the 9 December 2015, a letter requesting further assessment was sent to Arcadis Consultancy UK Limited (Annex 1). On the 7 January 2016 a response to this letter was issued by Arcadis Consultancy UK Limited to the MMO (Annex 2). Cefas were consulted again and a response from Cefas was received on the 15 February 2016.

With regard to the information provided in these responses, the MMO considers that
suitable justification has been provided to demonstrate that the current level of sampling is suitable.

6.2.4 Disturbance to migratory fish

Cefas raised several comments regarding the impact of piling, both percussive and non-percussive, on fisheries. In response to these comments on the 9 December 2015, a letter requesting further assessment was sent to Arcadis Consultancy UK Limited (Annex 1). On the 7 January 2016 a response to this letter was issued by Arcadis Consultancy UK Limited to the MMO (Annex 2). Cefas were consulted again and a response from Cefas was received on the 15 February 2016.

Fish mobility

Cefas advised that the mobility of fish species should be evaluated further in relation to movement away from significant disturbance.

Arcadis Consultancy UK Limited highlighted the sections within the ES (6.6.1 and 6.7.1) which addressed these concerns, and Cefas agreed that no further action was required.

Fish fry

Cefas requested further consideration on the impacts of piling activities on fish species that possess swim bladders during their larval stage as well as further consideration of spawning periods.

With regard to the comments provided by Cefas on the Arcadis Consultancy UK Limited response, the MMO considers that as piling is scheduled to take place in winter the presence of fish fry is likely to be lower. The MMO considers that there is no expected significant effect on fish populations in the area.

Subacoustech Report

Cefas requested that further methodological background be provided concerning the estimated source levels of the Subacoustech 2014 report referenced in Section 6.6.1 of the ES.

With regard to the comments provided by Cefas on the Arcadis Consultancy UK Limited response, the MMO considers that the level of information provided is suitable and that no further action is required.

6.2.5 Habitats Regulations Assessments

Natural England advised that a Habitats Regulations Assessment be completed for designated sites. The MMO completed a Likely Significant Effect Test (Regulation 61 of the Conservation of Habitats and Species Regulations 2010, Statutory Instrument 2010/490) has been carried out on the following sites:
- Start Point to Plymouth Sound and Eddystone Site of Community Importance (SCI);
- Tamar Estuaries Complex Special Protection Area (SPA).
- Plymouth Sound and Estuaries Special Area of Conservation (SAC); and
- Dartmoor Special Area of Conservation (SAC).

Following the assessment, the MMO has concluded no likely significant effect for Start Point to Plymouth Sound and Eddystone SCI and Tamar Estuaries Complex SPA. Natural England was consulted on this assessment and concurred with the conclusion. Because it has been determined that none of the features of the sites will be impacted significantly, the MMO has not conducted further assessment into potential impacts on sub-features as this is considered unnecessary.

The MMO could not conclude that there would be no likely significant effect on Plymouth Sound and Estuaries SAC and Dartmoor SAC. The MMO completed an Appropriate Assessment (Regulation 61 of the Conservation of Habitats and Species Regulations 2010, Statutory Instrument 2010/490) for these sites.

Following the assessment, the MMO has concluded no adverse effect on site integrity for Plymouth Sound and Estuaries SAC and Dartmoor SAC, providing the mitigation measures identified are imposed. Natural England was consulted on this assessment and concurred with the conclusion.

During the determination period the assessments were updated to reflect the change in disposal site to Plymouth Deep PL035 and were updated in line with updated Conservation Advice Packages. The conclusions of the assessments were not changed as a result of this update. NE has been consulted on the updated assessments and concurs with our conclusion.

### 6.2.6 Marine Conservation Zone Assessments

Natural England advised that a Marine Conservation Zone Stage 1 Assessment be completed for designated sites. The MMO completed a Marine Conservation Zone (MCZ) Screening. The result of the Screening exercise concluded that a Stage One Assessment would be required for the following sites:

- Whitsand and Looe Bay MCZ; and
- Tamar Estuary Sites MCZ.

The MMO concluded that the activities will not hinder the achievement of the conservation objectives for the MCZ either alone or in-combination with other known activities. Natural England was consulted on these assessments and concurred with the conclusions.

During the determination period the assessments were updated to reflect the change in disposal site to Plymouth Deep PL035 and were updated in line with updated
Conservation Advice Packages.

The result of the re-screening exercise concluded that the MMO could not identify any process by which the activities could impact any ecological or geomorphological process on which the conservation of any protected feature of Whitsand and Looe Bay Marine Conservation Zone is (wholly or in part) dependant.

It was also concluded the need for a Stage One Assessment to be carried out on Tamar Estuary Sites Marine Conservation Zone. The MMO concluded that the activities will not hinder the achievement of the conservation objectives for the MCZ either alone or in combination with other known activities. Natural England has been consulted on our assessment and concurs with our conclusion.

6.2.7 Seagrass beds

Natural England noted the presence of Seagrass Beds and Intertidal Mudflats in the area, which are both considered Priority Habitats under the Natural Environment and Rural Communities Act 2006 (NERC).

Section 40 of the NERC Act states that ‘Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity’.

Intertidal Mudflats are designated sub-features within the Plymouth Sound and Estuaries Special Area of Conservation (SAC). Within the Habitats Regulations Assessments carried out by the MMO for Plymouth Sound and Estuaries SAC Intertidal Mudflats has been considered in an Appropriate Assessment, concluding that the project would not have an adverse effect on site, and therefore feature integrity.

A separate assessment on Seagrass Beds has been carried out, concluding the works are unlikely to cause a negative impact to the BAP Priority Habitat.

The MMO considers that due regard has been given to Seagrass Beds and Intertidal Mudflats.

6.2.8 Bass Nursery Areas

The MMO South Western Coastal Office advised that the proposed work area sits within Bass Nursery Areas, suggesting that Cornwall Inshore Fisheries and Conservation Authority (CIFCA) and Cefas be consulted concerning the impact of major construction work and dredging in relation to the impact on the population.

Cefas and CIFCA deferred to the decision of the Environment Agency. The Environment Agency was contacted confirmed that the Environment Agency had no comments to make about the bass nursery area within the Tamar Estuary.
6.2.9 Disposal Site Suitability

Cornwall County Council commented on the potential of the disposal site PL20 being reopened for the disposal of dredged material.

The MMO has responded to Cornwall County Council stating that this matter is outside of the remit of its current decision making and therefore all assessments and determinations have been based on the use of Rame Head South, which is an open disposal site.

During the determination period a new disposal site within the area was designated. Plymouth Deep (PL035) was selected as the best site in terms of the practical, economic and environmental costs. Rame Head South was not selected due to the increased regulatory burden associated with licence applications to this disposal site.

Based on the data used to characterise PL035 as a disposal site, the MMO considers that disposal activities would have minimal impact to the marine environment. No further consultation was undertaken concerning this change as a wide ranging consultation was undertaken in the PL035 site characterisation process and the change of disposal sites is considered a minor amendment.

Monitoring of Plymouth Deep is currently being undertaken, which may require further consideration of potential impacts.

6.3 Archaeology and Cultural Heritage

The ES considers the impacts of the project on both designated heritage assets and non-designated heritage assets. No designated heritage assets were identified within the proposed development site. The only identified non-designated heritage assets are geophysical anomalies, most of which are modern in date or undated debris.

The ES concludes that there is a low potential for the presence of unidentified non-designated heritage assets. The mitigation strategy proposed is an archaeological watching brief.

Historic England were consulted and requested a Written Scheme of Investigations for the archaeological monitoring of dredging operations be produced before works could begin. This has been added as a condition to the marine licence (Section 8.1).

6.4 Noise and Vibration

The ES considers the impacts of noise and vibration from operational plant noise and construction noise impacts, concluding that, given the mitigation measures detailed, impacts would have a maximum significance of moderate adverse.

Impacts of noise and vibration on ecological receptors are considered in Section 6.2. No other representations regarding noise and vibration were submitted.
Therefore, the MMO considers that the ES accurately assesses the impacts and, given the mitigation measures suggested, there will be no significant effects of noise and vibration.

6.5 Landscape and Visual Impact Assessment

The ES considers the impacts of the project on landscape and visual amenity, concluding there would not be significant effects on landscape character and visual amenity. As such no mitigation measures have been suggested.

Tamar Valley Area of Outstanding Natural Beauty (AONB), Cornwall AONB, Natural England, Cornwall County Council, and Plymouth City Council were consulted and raised no issues regarding landscape and visual impact.

Therefore, the MMO considers that the ES accurately assesses the impacts and agrees that no mitigation measures are required for impacts to landscape and visual impact.

7. Cumulative Impacts

Cumulative impacts are considered throughout the ES. The identified developments within the vicinity of the site are:

- MOD Forward Operating Base at Kinterbury Point
- MOD Refurbishment and Operation of Trevol Jetty
- South West Devon Waste Partnership Combined Heat and Power Plant.

Also considered are the combined effects on different environmental aspects of Thanckes OFD development on a particular receptor.

The ES concludes that no likely cumulative effects are anticipated during the construction and operational phase of these other developments.

In their consultation response, Natural England requested that further consideration be given to the cumulative impacts of disposal activities on Whitsand and Looe Bay Marine Conservation Zone (MCZ).

During the determination period a new disposal site within the area was designated. Due to the change in disposal location the impacts to MCZ’s were re-screened and no pathway between disposal activities and Whitsand and Looe Bay MCZ were identified.

8. Decision

The MMO concludes that EIA consent for the project should be given.

A full assessment into the environmental impacts has been undertaken on the construction and operational phases. The review has highlighted areas of direct and indirect; temporary and permanent; and short and long term impacts, and concluded that these impacts are
minor or moderate.

After considering the information in the ES and the responses from consultees, the MMO concludes no likely significant impact to the environment either individually or cumulatively.

The MMO concludes that adequate mitigation strategies have been agreed to minimise or remove the potential impacts of the Project. The scheme will be controlled by a marine licence which will be subject to the following conditions:

8.1 Marine licence conditions

<table>
<thead>
<tr>
<th>Reference</th>
<th>Condition</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The licence holder must notify the MMO prior to the commencement of the first instance of any licensed activity. This notice must be received by the MMO no less than five working days before the commencement of that licensed activity.</td>
<td>Standard Condition</td>
</tr>
<tr>
<td>2</td>
<td>Where provisions under section 71(5) of the 2009 Act apply, all conditions attached to this licence apply to any person who for the time being owns, occupies or enjoys any use of the licensed activities for which this licence has been granted.</td>
<td>Standard Condition</td>
</tr>
<tr>
<td>3</td>
<td>The licence holder must notify the MMO in writing of any agents, contractors or sub-contractors that will carry on any licensed activity listed in section 4 of this licence on behalf of the licence holder. Such notification must be received by the MMO no less than 24 hours before the commencement of the licensed activity. The licence holder must ensure that a copy of this licence and any subsequent revisions or amendments has been provided to, read and understood by any agents, contractors or sub-contractors that will carry on any licensed activity listed in section 4 of this licence on behalf of the licence holder.</td>
<td>Standard Condition</td>
</tr>
<tr>
<td>4</td>
<td>The licence holder must notify the MMO in writing of any vessel being used to carry on any licensed activity listed in section 4 of this licence on behalf of the licence holder. Such notification must be received by the MMO no less than 24 hours before the commencement of the licensed activity. Notification must include the master's name, vessel type, vessel IMO number and vessel owner or operating company. The licence holder must ensure that a copy of this licence and any subsequent revisions or amendments has been read and understood by the masters of any vessel being used to carry on any licensed activity listed in section 4 of this licence, and that a copy of this licence is held on board any such vessel.</td>
<td>Standard Condition</td>
</tr>
<tr>
<td>5</td>
<td>Should the licence holder become aware that any of the information on which the granting of this licence was based has changed or is likely to change, they must notify the MMO at the earliest opportunity. Failure to do so may render this licence invalid and may lead to enforcement action.</td>
<td>Standard Condition</td>
</tr>
</tbody>
</table>
### Project Specific Conditions

#### Pre Works

<table>
<thead>
<tr>
<th>Activity</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Where a licensed activity comprises dredging or the disposal of dredged material, the total quantity of material authorised to be dredged or disposed of in any given time period shall be as set out for that licensed activity in section 4 of this licence. For each time period, the actual quantity dredged or disposed of shall be calculated by adding the quantity of material dredged or disposed of during that time period under this version of this licence to that dredged or disposed of under any previous version of this licence that was valid during that time period.</td>
<td>Standard Condition</td>
</tr>
<tr>
<td>7</td>
<td>The Licence Holder must submit a copy of a Construction and Environmental Management Plan (CEMP) to the MMO for approval at least four months prior to the proposed commencement of any phase of construction work. The scope of the CEMP must document the environmental management requirements, including consideration of the mitigation measures detailed in the Environmental Statement, for all parties involved with the project and affected by it, to be agreed with the MMO prior to submission of the CEMP, at least six months prior to the proposed commencement of any phase of construction work. Activities 1.1, 1.2 and 1.3 of Section 4 of this licence must not commence until such a time as the CEMP has been agreed in writing by the MMO. Activities must be carried out in accordance with the measures agreed in the CEMP.</td>
<td>To minimise the environmental impacts of the works by ensuring best practices are adopted and suitable mitigation measures are adopted.</td>
</tr>
<tr>
<td>8</td>
<td>HM Coastguard (<a href="mailto:nmoccontroller@hmcg.gov.uk">mailto:nmoccontroller@hmcg.gov.uk</a>) must be notified prior to commencement of activities. The MMO must be sent a copy within 7 days of the issue of this notification.</td>
<td>To ensure HM Coastguard is aware of the activities.</td>
</tr>
<tr>
<td>9</td>
<td>The Licence Holder must ensure that local mariners and fishermen's organisations are made fully aware of the activity through local notices to mariners. The MMO must be sent a copy of the notification within 5 days of issue.</td>
<td>To ensure safety of navigation.</td>
</tr>
</tbody>
</table>
The Licence Holder must prepare a Written Scheme of Investigation (WSI) for the archaeological monitoring of dredging operations.

The WSI must be submitted to the MMO for approval at least four months prior to the proposed commencement of licensed activities.

The WSI must include the statement of significance and research objectives, and:

- the programme and methodology of site investigation and recording and the nomination of a competent person(s) or organisation to undertake the agreed works;
- the requirements of the guidance note ‘Marine aggregate dredging and the Historic Environment’ (BMAPA and English Heritage, 2003), the related ‘Protocol for Reporting finds of Archaeological Interest’ (BMAPA and English Heritage, 2005) and any subsequent replacements; and
- the programme for post-investigation assessment and subsequent analysis, publication & dissemination and deposition of resulting material.

Licensed activities must not commence until such a time as the WSI has been agreed in writing by the MMO. Activities must be carried out in accordance with the measures agreed in the WSI.

The licence holder must submit information on the expected location, start and end dates of impact pile driving to the Marine Noise Registry, in order to satisfy the ‘Forward Look’ requirements of the Registry, prior to the commencement of the licensed activities.

The licence holder must notify the MMO of the successful submission of ‘forward look’ data within 7 days of the submission.

https://mnr.jncc.gov.uk/

The Licence Holder must notify the United Kingdom Hydrographic Office (UKHO) of the works to permit the promulgation of Maritime Safety Information (MSI) and updating of nautical charts and publications through the national notices to mariners system, at least two months prior to the commencement of the works.

The MMO must be sent a copy of the notification to the UKHO within 24 hours of issue.

During Works

Prior to disposal at Plymouth Deep disposal site (PL035) prior notification by email to MMO Plymouth at Plymouth@marinemanagement.org.uk must be provided. This prior notification must be given at the latest by 1200 on the working day preceding the planned disposal activity.

In the event of e-mail failure, the prior notification must be given by telephone on 01752 228001.

The notification must include:

- Vessel Name and Masters name;
- Location of berth and earliest departure time; and
- Contact details for Master and vessel.
<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Purpose</th>
</tr>
</thead>
</table>
| 14| For each day's disposal activity to Plymouth Deep disposal site (PL035), a daily report is to be sent to Plymouth@marinemanagement.org.uk by 1200 of the day following disposal. The daily report must include:  
  - Start and stop times for each disposal episode, and latitude and longitude coordinates for those start and stop times; and  
  - Quantity of material discharged during each disposal episode.                                                                                     | In order to facilitate inspection by Marine Enforcement Officer.                                                                                                           |
| 15| During all trips to Plymouth Deep disposal site (PL035) by the disposal vessel, the vessel must maintain in operation the AIS (automatic identification system) which meets the performance standards drawn up by the International Maritime Organisation according to chapter V, Regulation 19, section 2.4.5 of the 1974 SOLAS Convention. | In order to facilitate inspection by Marine Enforcement Officer.                                                                                                           |
| 16| Bunding and/or storage facilities must be installed to contain and prevent the release of fuel, oils, and chemicals associated with plant, refuelling and construction equipment, into the marine environment. Secondary containment must be used with a capacity of no less than 110% of the container's storage capacity. | To minimise the risk of marine pollution incidents.                                                                                                                    |
| 17| Any oil, fuel or chemical spill within the marine environment must be reported to the MMO Marine Pollution Response Team within 12 hours. Within office hours: 0300 200 2024. Outside office hours: 07770 977 825. At all times if other numbers are unavailable: 0845 051 8486. dispersants@marinemanagement.org.uk | To ensure that any spills are appropriately recorded and managed to minimise the risk to sensitive receptors and the marine environment.                                                                                               |
| 18| Only coatings and treatments can be used that are suitable for use in the marine environment.                                                                                                                                                                                                          | To ensure hazardous chemicals that may be toxic, persistent or bioaccumulative are not released into the marine environment.                                                                                                     |
| 19| During licensed activities all wastes must be stored in designated areas that are isolated from surface water drains, open water and bunded to contain any spillage.                                                                                                                                                  | To minimise the risk of waste entering the marine environment.                                                                                                          |
| 20| Pile arisings from sediment within 30m of MBH08 (as defined in licence schedule 3) are not suitable for disposal at sea and must not be side cast or deposited in the marine environment. Only inert material (rock) is permissible for side casting or disposal at sea from within 30m of MBH08. | To ensure that only material which has contaminant levels within those ranges which are considered acceptable for disposal at sea are disposed via this route.                                                             |
| 21| Material must not be dredged at depths greater than 2.8m from the dredge area to the west of the jetty head (western channel).                                                                                                                                                                           | To ensure that only material which has contaminant levels within those ranges which are considered acceptable for disposal at sea are disposed via this route.                                                             |
| 22| No discharge overflow from the dredger hopper is to take place for material dredged at depths greater than 2.5m from the dredge area to the west of the jetty head (western channel).                                                                                                                                 | To prevent the remobilisation of contaminated sediment.                                                                                                               |
| 23| All reasonable precautions are taken to prevent the disposal of man-made debris at sea. Any man-made material must be separated from the dredged material and disposed of to land.                                                                 | To exclude the disposal to sea of man-made material such as shopping trolleys, masonry, paint cans etc.                                                                    |
| 24 | The licence holder must inform the MMO of the location and quantities of material disposed of each month under this licence. This information must be submitted to the MMO by 15 February each year for the months August to January inclusive, and by 15 August each year for the months February to July inclusive. | To allow compliance reporting under the OSPAR Convention agreement as required by Article 4 (3) of Annex II and Article 4(1) of Annex II. |
| 25 | The licence holder must ensure that all dropped objects are reported to the MMO using the Dropped Object Procedure Form as soon as reasonably practicable and in any event within 24 hours of the undertaker becoming aware of an incident. The Form can be found in licence schedule 4. On receipt of the Dropped Object Procedure Form, the MMO may require obstructions to be removed from the seabed at the licence holder's expense if reasonable to do so. | To ensure navigational safety. |
| 26 | Soft-start procedures must be used to ensure incremental increase in percussive pile power over a set time period until full operational power is achieved. The soft-start duration must be a period of not less than 5 minutes. Should piling cease for a period greater than 60 minutes, then the soft start procedure must be repeated. | To allow mobile sensitive receptors to move away from the source of acoustic disturbance in order to reduce the risk of injury. |
| 27 | Dredging to the east of the jetty head must only be undertaken between 1 December and 31 March each year inclusive. The estuary channel is delineated by the red line on Schedule 5. | To protect migratory fish species during the core sensitive period. |
| 28 | Percussive piling must not be undertaken during the period of between 1 April and 31 August each year inclusive. | To reduce the risk of injury and disturbance to Allis shad, Atlantic salmon, and Sea Trout during the core sensitive period of their migration. |
| 29 | Percussive piling must only take place between 1 September and 31 March each year inclusive and must only be undertaken between 08:00 and 18:00. The piling must adhere to the following seasonal restrictions: Between 1 September and 30 September each year inclusive: - Percussive piling must only be undertaken outside of subtidal areas; Or - Percussive piling must only be undertaken for a total of six hours per day during daylight hours. Between 1 November and 31 December each year inclusive: - Only one piling rig must be used; Or - Percussive piling must only be undertaken for a total of six hours per day during daylight hours. Multiple piling rigs can be used during this period. The six hour period begins at the point of the first impact and runs continuously, the striking of piles must cease each day once this uninterrupted 6 hour period has elapsed. Any activities associated with the piling, excluding the striking of piles, such as mobilisation, demobilisation, handling and placement of piles, may continue to take place outside this 6 hour period. | To reduce the risk of injury and disturbance to Smelt and other migratory fish species during the core sensitive period of their migration. |
### 30
In-situ monitoring of the noise levels produced by non-percussive piling methods (Vibro-piling, pile case oscillation and auguring/drilling) is to be undertaken for the first four piling events. This monitoring must be carried out as soon as reasonably possible, at the start of non-percussive piling and outside the core sensitive period of 1 April and 31 August each year inclusive.

If noise levels exceed the predicted levels within the core sensitive period of 1 April and 31 August each year inclusive of the Subacoustech predictions as detailed in Licence Schedule 6, the MMO must be notified and non-percussive piling is not to be undertaken until written agreement is provided by the MMO, in consultation with Natural England, the Environment Agency and Cefas.

This is to validate the Subacoustech predictions and to provide additional reassurance around the noise levels of these activities at this specific site to ensure the protection of migratory fish.

### 31
The licence holder must submit the exact locations and dates of impact pile driving to the Marine Noise Registry, in order to satisfy the 'Close-out' requirements of the Registry, at 6 month intervals from the commencement of impact pile driving. The final data must be submitted within 12 weeks of completion of impact pile driving.

The licence holder must notify the MMO of the successful submission of 'close out' data within 7 days of the submission.

https://mnr.jncc.gov.uk/

In order to collect the evidence required to support the implementation of the Marine Strategy Framework Directive, under descriptor 11.

### 32
Dredging activities under this licence must not be undertaken while other dredge activities are being undertaken within 700 metres of the works area (licence schedule 1).

To minimise in-combination impacts of dredging activities on smelt.

### Post Works

#### 33
The intertidal area must be returned to its original profile. To verify this, a baseline (photographic or other method) survey must be undertaken prior to the commencement of the licensed activities. A further repeat (photographic or other method) survey must be undertaken no later than 10 working days after the licensed activities have been completed. Both surveys must be submitted to the MMO within 10 working days of the survey data being collected.

To ensure the seabed is returned to a similar state after the licensed activities to promote recovery.

#### 34
All equipment, temporary structures, waste and/or debris associated with the licensed activities must be removed within 6 weeks upon completion of licensed activities.

To minimise impacts to the marine environment and other users of the sea/seabed.

#### 35
Navigation aids must be returned to their original position, or as close as reasonably practicable, following the completion of the works.

To ensure navigational safety.

#### 36
The licence holder must notify the local MMO office as detailed in section 2.2 of the completion of the licensed activities by the licence holder, no later than 10 working days after their completion.

To ensure the local MMO officer is aware of then licensed activities at sea occurring within its jurisdiction in order to notify other sea users and to arrange any enforcement visits where appropriate.
The licence holder must notify The Source Data Receipt team, UK Hydrographic Office, Taunton, Somerset, TA1 2DN (Email: hdcfiles@ukho.gov.uk; Tel: 01823 337900) of completion of the licensed activities, no later than 6 weeks after their completion. This notification must also include engineering drawings of the new jetty.

A copy of the notification must be sent to the MMO within one week of the notification being sent.

To ensure necessary amendments to charts can be made.