Permit Receipt Centre
Natural Resources Wales
Welsh Government Offices
Cathays Park
King Edward VII Avenue
Cardiff
CF10 3NQ
Tel: 0300 065 3000
Email: permitreceiptcentre@naturalresourceswales.gov.uk

APPLICATION FOR A MARINE LICENCE FOR MARINE WORKS

Marine Works include, but are not limited to, coast defences, beneficial uses of dredged materials, subsea cables, pontoons, jetties, land reclamation, grab samples and outfall pipes under the Marine and Coastal Access Act 2009

Please read the notes carefully before completing the form.

- The Marine Licensing Team (MLT) administers Part 4 of the Marine and Coastal Access Act 2009 on behalf of the Licensing Authority, the Welsh Ministers.

- The completed application form must be accompanied by a location plan and, where appropriate, descriptive drawing(s) and any supporting environmental assessments.

- Please submit applications to the **Permit Receipt Centre** via the details at the top of this form. For applications larger than 20MB, we would advise that you contact us to determine the most appropriate method for submitting your application.

- Please submit marine licence applications, including this form and all supporting documents, **at least 4 months before the licence is required.**

  Some projects may raise matters that require a significantly longer time for consideration. These are most likely to be:

  - Projects that fall **within** The Marine Works (Environmental Impact Assessment) Regulations 2007 – as amended requiring an Environmental Statement
  - Large scale projects with substantial volumes of material being deposited or excavated
  - Works requiring an Appropriate Assessment to be conducted under The Conservation of Habitats and Species Regulations 2017.

- Information should be provided about the anticipated **duration of the entire project** in respect of works below/seaward of Mean High Water Spring (MHWS). Where appropriate, planned phasing of the work for which consent is sought must be detailed. For projects lasting more than one calendar year, planned phasing details must be given for each 12 month period.

A licence fee is payable in respect of an application. Details of fees can be found on our web pages.

Please note applications will not be processed without the correct relevant fee or invoicing details.

- Payments can be made via Cheque, BACS or credit/debit card.
  - Cheques should be crossed and made payable to **Natural Resources Wales**.
  - For BACS payments ensure you provide the reference number (not remittance number)

  Further information on payment methods can be found on our web pages.

- **All activities need to comply with the Water Framework Directive (WFD). The framework and guidance can be found on the Natural Resources Wales website,**

http://naturalresources.wales. **The results of your WFD assessment must be attached to your marine licence application.**

- Please answer all questions. If any information is not available at the time of application please indicate in the relevant section, giving reasoning in a covering letter. Outstanding details must be submitted as soon as possible. Any delay in forwarding details is likely to result in delays in determining your application.

  Your application may not be considered complete and therefore not processed until key information has been submitted. Your application may be returned if you fail to submit outstanding information within given timescales.

- Please note any licence may have conditions that must be discharged before works can commence. This will take additional time.
- If you have any queries with regards to completing this application please contact the MLT: marinelicensing@naturalresourceswales.gov.uk

How your application will be processed by the MLT:

- Submit all application to the **Permit Receipt Centre** via the details at the top of this form.
- Checked and acknowledged by the MLT within 21 days of receipt of application and payment
- If the application is complete and no further information is needed at this time, your application will be placed in a work queue to be assigned a permitting officer
- If the application is not complete, further information will be request and need to be provided before the application can be considered as complete
- Our **4 months** service level for determining non-EIA applications will begin from the date the **completed** application is received (*Please note some projects may take significantly longer than 4 months to determine due to their nature)*
- EIA projects may take significantly longer due to their scale and complexity. Therefore we encourage early engagement with the MLT
- Your application and supporting documents will be sent to for an initial consultation period of 28 days *(42 days for EIA projects)*
- For the majority of projects, a public notice must be advertised. Public consultation will be 28 days (*49 days for EIA projects*). For EIA projects a second public notice will be required. The MLT will advise on how this should be done.
- Responses to consultation will be considered and additional information requested at this time, if necessary.
- A decision on your Marine Licence Application will be made

All information submitted may be referred to within a licence, therefore all works must be in accordance with this information, unless otherwise agreed with NRW acting on behalf of the Licensing Authority during the determination process.
It is the responsibility of the applicant to obtain any other consents/authorisations that may be required.

Application Form Structure

1. Project Description and Cost
2. Applicant Details
3. Details of Agent, Contractor, Vehicles and/or Vessels used to carry out works
4. Environmental Impact Assessment (EIA)
5. Licensable Period
6. Project Description
7. Methods Statement
8. Materials of Project
9. Beach Replenishment, Land Reclamation or Salt Marsh Feeding
10. Temporary Works
11. Dredge and Disposal of Dredge Material
12. Protected Sites
13. Other Consents
14. Statutory Powers
15. Public Register
16. Application Fee
17. Declaration

Check List

Please ensure that you have included all the necessary information before you submit your application. **If any of the below are not completed in the application form, the application is likely to be considered incomplete and may be returned to you**

Item	Yes (√)
The applicant is a legal entity?	X
The declaration is signed by the applicant?	X
Is the application fee correct?	X
Are the grid references/coordinates correct?	X
Do the coordinates match map locations?	X
Have all the relevant supporting documents been submitted?	X
Has a clear methodology been provided in the application form?	X
Has Protected sites information been included?	X
Has a Water Framework Directive (WFD) assessment been submitted?	X
Are all the continuation sheets for application questions appended with correct corresponding numbers?	X

Should you have any queries regarding you application please contact the MLT via marinelicensing@naturalresourceswales.gov.uk

1. Project Description and Cost

1 (a). Project Name

DragonLNG Jetty repairs

1(b). Please provide a brief description of the proposed project, including location

DragonLNG is an operational liquefied natural gas (LNG) terminal operating in Milford Haven since 2009. DragonLNG is looking to undertake repairs for their jetty at Milford Haven in Pembrokeshire, Wales (referred to as the 'proposed scheme'). The jetty was constructed in the 1960s, built of steel piles, with a concrete roadway on top. Recent observations have identified potential issues with the integrity of the concrete roadway. In response, DragonLNG is looking to undertake an inspection of the jetty and carry out any subsequent repairs.

1(c). Please provide an estimated gross cost of the project (Inc. materials and labour) for works that fall below/seaward of Mean High Water Springs (MHWS)

£5,000,000

2. Applicant Details

To whom the licence will be issued. *This must be a legal entity such as an individual, registered company/ charity or public body.*

Title	Mr	Full Name	Richard MacKay

Company or Trading Name	Dragon LNG Limited
Company Registration Number (if applicable)	04562711
Name of Contact or individual (if different)	
Position in Company	Project Engineer
Address inc. postcode (provide registered Company address if applicable)	Main Road, Waterston, Milford Haven, Pembrokeshire, SA73 1DR
Telephone Number	01646691730
Email Address	richard.mackay@dragonlng.com

3. Details of Agent, Contractor, Vehicles and/or Vessels used to carry out works

3(a). Agent Details

This is who we will correspond with unless otherwise informed. If no agent we will contact the applicant.

Title	Miss
Full Name	Rachel Greaves
Company or Trading Name	Haskoning UK Ltd
Company Registration Number (if applicable)	1336844
Name of Contact or individual (if different)	
Position in Company	Marine Environmental Consultant
Address (Inc. postcode)	Westpoint, Peterborough PE2 6FZ
Telephone Number	0151 243 6484
Email Address	Rachel.greaves@haskoning.com

3(b). Does the Applicant wish to be included in all correspondence? Yes ☒ No ☐

3(c). Contractor Details

In order for contractors to benefit from the licence permission, details must be provided. *Any details not provided with application must be confirmed before operations commence.*

Contractor Company or Trading Name	Address

3(d). Will the works require the use of vessels? Yes ☒ No ☐

3(d) (i).Vessel Details (if applicable and available)
In order for contractors to benefit from the licence permission, details must be provided.
Any details not provided with application must be confirmed before operations commence.

Operator	Name of Vessel	Type of Vessel	Vessel Registration Number	Country of Registration

3(e). Will the works require the use of vehicle? Yes ☒ No ☐

3(e) (i). Vehicle Details (if applicable and available) to be used below MHWS
In order for contractors to benefit from the licence permission, details must be provided.
Any details not provided with application must be confirmed before operations commence.

Operator	Type/Description of Vehicle

3(f). If the contractor or vessels or vehicles are not known at the application stage, when do you expect to provide these details?
These details will need to be confirmed prior to the licence and operations commencement

DragonLNG aims to award the Principle Contractor Role January 2026.

4. Environmental Impact Assessment (EIA)

Certain projects, due to their scale, location and/or nature, may require an EIA under the Environmental Impact Assessment Directive (Directive 85/337/EEC – as amended). If a project qualifies under EIA, an Environmental Statement (ES) must be prepared and submitted with the application.

Projects that fall within Annex I of the Directive automatically require an EIA. Projects that fall within Annex II of the Directive are assessed on a case-by-case basis for the requirement for an EIA to be undertaken.

4(a). Do you consider the works to be under the Environmental Impact Assessment Directive (Directive 85/337/EEC – as amended)? Yes ☐ No ☒

4(a) (i) If Yes, which Annex does the proposal fall under? Annex I☐ Annex II☐

4(a) (ii) Which number(s) within the Annex does the proposal relate to?

The works are not considered to fall under Annex I or Annex II as the works are for repairs to DragonLNG's existing Jetty.

4(b). Have you applied for a screening or scoping opinion from the MLT under the Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended)? Yes ☐ No ☒

4(b) (i). If Yes, please provide the reference number

4(c). Has an Environmental Impact Assessment been undertaken? Yes ☐ No ☒

4(c)(i). If Yes, has an Environmental Statement been submitted to support this Marine Licence application? Yes ☐ No ☒

4(d). If an Environmental Impact Assessment has been undertaken, but an ES has not been submitted, please provide an explanation

Please continue on a separate sheet if necessary. Please tick if you have done this ☐

5. Licensable Period

Determination of applications will be based on the works taking place during these dates. Please ensure you have included an adequate contingency period. If works are not completed by the Requested Licence Expiry Date you may be required to submit a new application. *Including a contingency period within your original application does not impact on Licence Fee*

Start Date	01/01/2026	**Requested Licence Expiry Date**	01/01/2031

*Please ensure you submit your application for a Marine Licence **at least 4 months** prior to the intended start date. Some projects, such as EIA projects, will take significantly longer to determine.*

6. Project Description

6(a). Please give a description of the proposed project.
This should include the purpose of the project, estimated timescales of construction and operation, and broken down by the phases of works, if applicable.
Details should include, but not be limited to, dimensions of project, quantity of material being deposited and removed.

The proposed scheme consists of the inspection and subsequent repairs of DragonLNG's jetty. The inspection will consist of constructing a temporary access system along the jetty. The concrete will be inspected visually and also through the use of a 'hammer test' (using a handheld hammer to determine the thickness and state of the concrete). The inspection will inform whether repairs are only required for the concrete or if the rebars also need replacing. Following the repair works, a protective coating will be applied to the jetty.

The proposed jetty structure varies in height above the water due to tidal fluctuations. On average, the underside of the jetty deck sits approximately 3.0 to 3.5 m above the waterline at high tide, increasing to around 4.5 to 5.5 m at low tide. These measurements are site-specific and have been verified through recent surveys conducted by DragonLNG or as-built drawings. The total area of concrete on the jetty is approximately 3,000 m².

See Section 18 for more information.

Please continue on a separate sheet if necessary. Please tick if you have done this ☐

6(b). Please detail the location of the proposed construction project.
These should be Latitude and Longitude coordinates (WGS84) in decimal degrees to 5 decimal places (e.g. Lat 52.12345 Long -4.12345), defining the extent of the project.

The proposed scheme is located in Milford Haven at OS Grid reference SM928044.

51.700599	-4.9961109
51.700313	-4.9969692
51.700612	-4.9998445
51.700492	-5.0000913
51.7002	-5.0001342
51.700266	-5.0007994
51.699934	-5.0009818
51.69984	-5.0005848
51.6998	-4.9999196

Please continue on a separate sheet if necessary. Please tick if you have done this ☐

6(c). The following must be provided with the completed application form:

(i) a suitably scaled extract of an Ordnance Survey Map or Admiralty Chart with location of project, complete with **North Arrow** and **Scale**

(ii) construction plans and sectional drawings showing those proposed works below/seaward of MHWS, which should give details of the materials to be used (for beach replenishment the quantity, particle size and source of material to be deposited and deposit location is also required).

(iii) a descriptive schematic drawing and suitably scaled location plan which show the full extent of the project clearly in relation to the surrounding area and features.

Please list below **all supporting documents** that have been submitted with this application, including suitable documents/maps/drawing titles and reference numbers

(i) A location plan has been provided with the application. PC7468-HAS-XX-XX-DR-GS-0001_LocationPlan

Please continue on a separate sheet if necessary. Please tick if you have done this ☐

The applicant should note that these drawings/plans may be copied to others as part of the MLT's consultation procedures. If they are subject to copyright, it is the **responsibility of the applicant to obtain the necessary approvals to reproduce the documents.**

7. Methods Statement

7(a). Please provide a detailed method statement for the works
This must include methods for all works including temporary structures or deposits such as jetties, cofferdams, moorings or landing stages to be constructed seaward of MHWS

Concrete removal
Deteriorated concrete will be removed using a combination of hand tools, pneumatic chipping hammers, and, where appropriate, hydro-demolition. Removal will be controlled to prevent overbreak, minimise damage to surrounding structures and loss to the marine environment.

Concrete pouring
Concrete will be poured in small sections of up to 2 m. Depending on the location and access chosen, concrete will be poured using either form-and-pour techniques, shotcrete application, or pre-mixed concrete delivered via pump lines. Admixtures may be used to improve workability and reduce curing time. A protective coating will then be applied to the concrete using rollers (or similar). The coating to be used will be reviewed to ensure suitable for application in the marine environment. It is expected to provide adequate protection against typical conditions encountered in coastal and offshore environments

Please continue on a separate sheet if necessary. Please tick if you have done this ☐

7(b). Do you intend to undertake activities that could generate underwater noise?
This include piling, use of explosives, geophysical, acoustic deterrent devices and multibean echosounders. Yes ☐ No ☒

7(b) (i). If Yes, what type(s) of activities will be undertaken?

The works are for concrete removal and replacement of DragonLNG existing Jetty, there are no proposed activities that could generate underwater noise.

7(b) (ii). If Yes, approximately how many days will the activity be undertaken for?

The works are for concrete removal and replacement of DragonLNG existing Jetty, there are no proposed activities that could generate underwater noise.

If Yes, you will be required to complete an additional form that will be provided.

7(c). Please state the measures to be taken to:
(i) Minimise risk to the marine environment

Dust control; It is proposed to use water misting systems and wet cutting techniques to suppress dust during concrete removal. Additionally, vacuum systems would be used in confined or sensitive areas.
Leaks and spills; All equipment will be inspected prior to mobilisation. Spill kits will be stationed at every work zone with drip trays placed under stationary machinery. Refuelling will be conducted away from the water where feasible, and secondary containment is proposed for fuel and chemical storage.
Containment measures; Silt curtains or floating booms will be deployed around work areas where there is a risk of material entering the water. It is proposed to install attachment trays or netting under the repair
zones to capture any falling debris or slurry.

(ii) Prevent undue interference to others

The works are being completed on DragonLNGs land and infrastructure so no interference with others anticipated.

(iii) Maintain navigational safety, including marking and lighting of works

The works are being completed on DragonLNGs infrastructure so no impact expected with navigation safety. No marking or lighting to be affected.

Please continue on a separate sheet if necessary. Please tick if you have done this ☐

8. Materials of Project

8(a). Description of materials to be deposited seaward of MHWS (Please tick all that apply)

Timber	☐	Iron/Steel	☐	Concrete	☒	Biocides/other chemicals	☐
Silt	☐	Stone/Rock	☐	Gravel	☐	Plastic/Synthetics	☐
Sand	☐	Other	☒				

If other, please provide a description of materials.

Protective coating for the jetty

8(b). Delivery method of materials to site

If sea delivery, please include details of vessels to be used with a chart of proposed route and transhipment area. If vehicle delivery, please provide the proposed access route.

Delivery will be by land and using main road access to site. Any delivery required for this job will be executed using standard road going lorries

Please continue on a separate sheet if necessary. Please tick if you have done this ☐

8(c). Will the works involve removals seaward of MHWS? Yes ☒ No ☐

8(c) (i). Description of materials to be removed seaward of MHWS (Please tick all that apply)

Timber	☐	Iron/Steel	☐	Concrete	☒	Biocides/other chemicals	☐

Silt ☐ Stone/Rock ☐ Gravel ☐ Plastic/Synthetics ☐
Sand ☐ Other ☐

8(c) (ii). Description of objects/materials to be removed seaward of MHWS
Including quantities to be removed.

Deteriorated concrete will be removed using a combination of hand tools, pneumatic chipping hammers, and, where appropriate, hydro-demolition. Removal will be controlled to prevent overbreak, minimise damage to surrounding structures and loss to the marine environment. An estimation of the concreate to be removed once the hammer test has been concluded.

9. Beach Replenishment, Land Reclamation or Salt Marsh Feeding

For works involving any of the above, please provide the following information

9(a). Is the material to be deposited like for like to existing material? Yes ☐ No ☐

9(a)(i) If No for Beach Replenishment please provide justification why?

Work does not involve Beach Replenishment, Land Reclamation or Salt Marsh Feeding.

9(b). Description of material to be deposited
Please provide the grading specification of materials to be used, if using a range of grain sizes please state the percentage by weight passing. *If unsure, please refer to the Wentworth Scale*

Work does not involve Beach Replenishment, Land Reclamation or Salt Marsh Feeding.

Please continue on a separate sheet if necessary. Please tick if you have done this ☐

9(c). Source of the material to be deposited
Including dredged or land based stating the origin of material

Work does not involve Beach Replenishment, Land Reclamation or Salt Marsh Feeding.

9(d). Has the material been chemically analysed? Yes ☐ No ☐
If material has been analysed, we may request this information to determine the application

9(d) (i) If Yes, is the analysis data been included with the application? Yes ☐ No ☐

10. Temporary Works

10(a). Will there be any temporary deposits below MHWS? Yes ☐ No ☒
This includes construction materials, removed objects/material, jetties or cofferdams
If **Yes**, please continue with section **10**

10(b). Please provide the location of temporary deposits
Please include a map/chart displaying the location of temporary deposits, if necessary.

Work does not include any temporary deposits below MWHS. There will be temporary access constructed to carry out the works but these will be secured to the jetty and will remain dry.

10(c). Description of temporary deposits

Work does not include any temporary deposits below MWHS.

Please continue on a separate sheet if necessary. Please tick if you have done this ☐

11. Dredge and Disposal of Dredge Material

If you are undertaking Dredge and Disposal activities please also complete the Dredge and Disposal application form and submit together.

11(a). Do you intend to apply for a marine licence to dispose of dredged material to sea as part of the works in this application? Yes ☐ No ☒

12. Protected Sites

Licensing Authorities have a duty to ensure that projects will **not have significant adverse environmental impact**, particularly on any designated **European Site of Conservation Importance - Special Areas of Conservation (SAC) and Special Protection Areas (SPA), listed under the Habitats Directive (Council Directive 92/42/EEC on the conservation of natural habitats and of wild fauna and flora).** In addition, it is Government Policy that Wetlands of International Importance (Ramsar sites) are also considered as European Sites. There is a duty to take reasonable steps to further the conservation and enhancement of nationally designated sites (Sites of Special Scientific Interest (SSSIs).

12(a). Have you had pre-application correspondence with NRW, its legacy bodies or Natural England? Yes ☐ No ☒

12(a)(i). If Yes, please provide copies of correspondence with application and state which team(s) you have contacted?

N/A

12(b). Are any part of the works located *within* or *likely to affect* a designated conservation site? (SAC, SPA, SSSI or Ramsar) Yes ☒ No ☐

12(b)(i). If Yes, which designated site(s) may be affected?

Pembrokeshire Marine / Sir Benfro Forol SAC (UK0013116) (0 km from project)

12(c). Please provide a description of all mitigation measures proposed to avoid any impact on designated conservation sites.

While there is a potential for materials (e.g. concrete) to fall into the water from the works above and contaminants to enter the marine environment through accidental spills from machinery, vehicles and vessels, it is considered that the application of standard/ legally required working practices such as nets to catch falling debris as well as pollution prevention measures applied across the area of works (e.g. MARPOL requirement) will significantly reduce the potential for any impact to occur. On this basis and considering the nature of the proposed scheme, that activities will take place within a confined envelope i.e. the jetty footprint, the annual duration of activities (May to September) and the significant size of the SAC, it can be concluded that there is no discernible pathway for an effect on large shallow inlets and bays, estuaries, reefs and mudflats and sandflats not covered by seawater at low tide.

See Attached Shadow HRA for full assessment.

Please continue on a separate sheet if necessary. Please tick if you have done this ☐

12(d). If the works are not located *within* or *likely to affect* a designated conservation site, please indicated the approximate distance to the nearest designated conservation site.

N/A

Please note that if the proposed works are in or within 2km of a European Site of Conservation Importance you will have to provide suitable mitigation measure to avoid any impact on designated conservation sites.

13. Other Consents

Please detail all consents that you have applied for or received for these works

Type of Consent	Applied for	To be applied for	Reference Number	Date of Issue and Expiry
Planning Permission under Town and County Planning Act 1990 – From Local Planning Authority (LPA)				
Name and Address of LPA for location of works				
Land Owners Consent such as The Crown Estate Consent				
Port Authority or Local Harbour permissions				
Other NRW consents *such as Flood Defence or SSSI assent*				
Details of NRW consent				
Other consents *such as Transport and Works Act Order, Section 36 Electricity Act, grant/loan sanction*				
Details of other consents				

14. Statutory Powers

14(a).Does the applicant have statutory powers to consent any aspect of the project?
E.g. coast protection authority, dredging powers, statutory undertakers Yes ☐ No ☒

14(a)(i).If Yes, please give details and state the relevant legislation that gives these powers

N/A

15. Public Register

Under The Marine Licensing (Register of Licensing Information)(Wales) Regulations 2011 and the Environmental Impact Assessment Directive (Directive 85/337/EEC – as amended) , all information contained within or provided in support of this application will be placed on the Public Register unless NRW approve of the applicant's reasons for withholding all or part.

15. 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:

15(a). Would be contrary to the interest of National Security? Yes ☐ No ☒

15(b). Would prejudice to an unreasonable degree you, or some other person's commercial interest of those of a third party? Yes ☐ No ☒

If **Yes** to either (a) or (b), please provide full justification as to why all or part of the information you have provided should be withheld

N/A

Please continue on a separate sheet if necessary. Please tick if you have done this ☐

16. Application Fee

16(a). What are the corresponding fee band for this application? Band 2 ☐ Band 3 ☒

16(b) Band 2 Only
Projects are charged at a fixed fee of £1920. The application will not be processed until the correct fee has been provided.

Please provide the method of payment

Method	Yes (√)	Reference Number
Cheque		

BACS (not remittance no.)		
World Pay (phone)		

16(c) Band 3 Application only
Band 3 applications are charged at on hourly rate of £120 and are invoiced in arrears. Please complete the details below which will be required for invoicing.

Customer Name	Haskoning
FAO	
Purchase order number	PC7468-101-100
Address for invoice	Royal Haskoning Westpoint, Peterborough Business Park, Lynch Wood Peterborough PE2 6FZ
Telephone Number	+441512436484
Email Address	rachel.greaves@haskoning.com

17. Declaration

I declare that to the best of my knowledge and belief that the information given in this application form and supporting documentation is true.

WARNING: It is an offence under the Marine and Coastal Access Act 2009, under which this application is made, to fail to disclose information or to provide false or misleading information and can invalidate any licence granted.

Signature _____ **Date** 14/10/2025

Name *(in capitals)* RICHARD MACKAY

Position in Company PROJECT ENGINEER.

*Applications cannot be processed unless signed by the **Applicant** (not agent), the applicant must have appropriate level of authority within the company.*

Applications will not be processed unless signed

Commented [RG3]: Rich can you please fill these sections out

18. Project description continued

Construction methodology

Access

Land based access will be from the north end of the jetty where the structure meets the shore. Mobile equipment such as scaffolding and access towers will be used for land based repairs.

Barges and workboats will be used for transporting materials and equipment to site and will be used to reach the seaward sections for the jetty repairs. Suspended scaffolding or work platforms will be used for safe access beneath the deck when working over water. All access systems are engineered and will be approved in accordance with safety standards.

Concrete removal

Deteriorated concrete will be removed using a combination of hand tools, pneumatic chipping hammers, and, where appropriate, hydro-demolition. Removal will be controlled to prevent overbreak, minimise damage to surrounding structures and loss to the marine environment.

Concrete pouring

Concrete will be poured in small sections of up to 2 m. Depending on the location and access chosen, concrete will be poured using either form-and-pour techniques, shotcrete application, or pre-mixed concrete delivered via pump lines. Admixtures may be used to improve workability and reduce curing time. A protective coating will then be applied to the concrete using rollers (or similar). The coating to be used will be reviewed to ensure suitable for application in the marine environment. It is expected to provide adequate protection against typical conditions encountered in coastal and offshore environments

Mitigation

Dust control

It is proposed to use water misting systems and wet cutting techniques to suppress dust during concrete removal. Additionally, vacuum systems would be used in confined or sensitive areas.

Leaks and spills

All equipment will be inspected prior to mobilisation. Spill kits will be stationed at every work zone with drip trays placed under stationary machinery. Refuelling will be conducted away from the water where feasible, and secondary containment is proposed for fuel and chemical storage.

Containment measures

Silt curtains or floating booms will be deployed around work areas where there is a risk of material entering the water. It is proposed to install attachment trays or netting under the repair zones to capture any falling debris or slurry.

Programme

The inspection and repairs works would be undertaken during the low shipping period (May to September) and expected to last up to four years.

Operation

There are no proposed changes to the operation of the Jetty due to the proposed works.