Document version number: (to be completed by marine licensing team)	
Approval date: (to be completed by marine licensing team)	

Marine Invasive Non-native Species Biosecurity Risk Assessment and Management Plan

A Marine Biosecurity Risk Assessment and Management Plan enables marine operators and contractors to understand and minimise the risk of introducing or spreading marine invasive non-native species (INNS). Management of marine INNS is extremely challenging once they are introduced to a new area. Effective biosecurity measures that minimise the risk of introduction or spread are therefore key to effective management.

Filling in this form:

To help you fill in this form, see accompanying document “Guidance for completing NRW’s Biosecurity Risk Assessment and Management Plan”. The accompanying document contains clarification of many key terms and also provides guidance on potential pathways of introduction for INNS (Table 1) and level of risk associated with each pathway (Table 2).

Structure of this form:

You will need to fill in Sections A and C. Fill in sections B1 to B5 when relevant to your activity. For further information on what is included in each section see the accompanying guidance document.

Section A: Activity overview

You should complete this section.

Section B: Risk Assessment

B.1 Assessing the pathway risks associated with vessels

If you are using a vessel (or vessels) as part of your licensed activity you should complete this section. Information on any equipment to be used which can be separated from the vessel should be provided in Section B.4.

B.2 Assessing the pathway risks associated with non-biological materials and water

If your activity involves the use or transfer of non-biological materials (e.g. water, sediment, construction material) you should complete this section.

B.3 Assessing the pathway risks associated with biological material

If your activity involves the use or transfer of biological material (including aquaculture) you should complete this section.

B.4 Assessing the pathway risks associated with equipment

If your activity involves use of equipment which can be separated from their vessel you should complete this section.

B.5 Assessing other pathway risks

This should be filled in if previous sections do not capture aspects of your activity.

Section C: Management Measures

You should complete this section.

Section D: Recommendations

You should consider this section.

Section A: Activity overview

Please fill out the activity details below:

Applicant name:	Neath Port Authority
Short description of activity: *(please provide enough detail for NRW to understand the location and the different elements of the project. Links to other documents which describe the project can be provided)*	The activity is a five-year maintenance dredging programme within the River Neath entrance channel, which provides navigable access to the Port of Neath, using land-based excavators and articulated dump trucks operating during suitable low-water periods. The purpose of the works is to remove accumulated sediment and maintain safe navigational access within the existing channel. The works are located within the tidal River Neath entrance channel at the Port of Neath, South Wales. Two dredging areas are proposed: the Inner Dredge Area (near Middle Light) and the Outer Dredge Area (near Monkstone Light). Material excavated from both areas will be transported via defined intertidal haul routes and deposited within the Outer Low Water Disposal Area. The marine licence application seeks authorisation to dredge up to 90,000 m³ during Licence Year 1, followed by up to 25,000 m³ per year during Licence Years 2-5, where maintenance dredging is required. The activities are limited to dredging, transport and disposal of dredged material and do not include capital deepening or widening of the navigation channel.
Estimated timings of proposed licensed activities:	Five years from commencement of the marine licence with the initial dredging campaign anticipated 2nd January 2027 subject to licence determination.

Section B: Risk Assessment

B.1 Assessing the pathway risks associated with vessels

Not applicable. No vessels will be used during the licensed activity; works will be undertaken using land-based excavators and articulated dump trucks only.

B.1.1. Please list all ports within the UK or overseas that all vessel(s) to be used (both during construction and maintenance) have visited over the 12 months prior to this licensed activity, or since the last out of water period (whichever is most recent).

Please state **N/A** if vessels have not entered any port since the last out of water period.

If you do not yet have the information to complete this section, please state **Unknown.** NRW may ask for this section to be updated when these details are known. The risk should be set as High.

Vessel name	**Port / location visited over last 12 months** (listed chronologically with dates if known)	**Which marine invasive non-native species known to be present at this port(s) / location(s)?**	**Has the vessel had antifouling?** 12 months prior to activity for biocidal coatings, 24 months for biocide-free coatings
Not applicable. No vessels will be used during the licensed activity; works will be undertaken using land-based excavators and articulated dump trucks only.			

Please add more rows if necessary

Please indicate the INNS risk level and justification of the risk below, separately for each vessel based on the locations visited in last 12 months. This should take into account the probability of biofouling and vessel antifouling regime. **Note:** Examples of risk levels are given in Table 2 of the accompanying guidance document and there is further information about this section in the accompanying guidance document.

Vessel name / type	**Risk Level (High, Medium, Low)**	**Justification of risk level**

Not applicable. No vessels will be used during the licensed activity; works will be undertaken using land-based excavators and articulated dump trucks only.		

B.1.2 Please provide details of the vessels (identified in Table B.1.1), which have not had antifouling (within the 12 months prior to the licensed activity for biocidal coatings, or 24 months for biocide-free coatings) and if there is an alternative antifouling management regime.

If there are not additional measures or an alternative biofouling management regime, then please put **None**, and the risk level would not change.

Vessel	**Alternative biofouling management regime** (e.g. different timeframes for antifouling treatment, vessel storage on land etc.)	**Risk Level (High, Medium, low)**
Not applicable. No vessels will be used during the licensed activity; works will be undertaken using land-based excavators and articulated dump trucks only.		

B.2 Assessing the pathway risks associated with non-biological materials and water

B.2.1: Please provide information about the source and receiving environments for non-biological materials and water transferred through the licensed activity from different pathways (for example hopper water, dredge material, construction material).

<table>
<tr><th>Pathway</th><th colspan="2">Location (including Coordinates, WGS84)</th><th>Relevant Environmental Conditions for INNS species (e.g. salinity and depth differences between source and receiving environments)</th><th>List of INNS known to be present</th><th>Risk Level (High, Medium or Low)</th><th>Justification of risk level</th></tr>
<tr><td rowspan="2">Transfer of marine INNS in dredge material and residual water</td><td>Source</td><td>Inner Dredge Area
<table><tr><th>Vertex</th><th>Latitude</th><th>Longitude</th></tr><tr><td>Outer West Corner</td><td>51.61198</td><td>-3.85812</td></tr><tr><td>Outer East Corner</td><td>51.61145</td><td>-3.85707</td></tr><tr><td>Inner East Corner</td><td>51.61255</td><td>-3.85545</td></tr><tr><td>Inner West Corner</td><td>51.61300</td><td>-3.85662</td></tr></table></td><td>Intertidal, sandy area.</td><td>None known (NBN Atlas, 2026, see Appendix 1).</td><td rowspan="2">Medium</td><td rowspan="2">The Inner Dredge Area and Outer Low Water Disposal Area are in close proximity, have similar intertidal sandy habitats, and are hydrodynamically connected by tidal currents.

No marine INNS are recorded in the source of receiving area (NBN Atlas, 2026, see Appendix 1), however the level of monitoring in the area is unknown. As dredged material, potentially including residual water, will be physically moved between areas, a</td></tr>
<tr><td>Receiving</td><td>Outer Low Water Disposal Area
<table><tr><th>Vertex</th><th>Latitude</th><th>Longitude</th></tr><tr><td>Outer West Corner</td><td>51.60450</td><td>-3.86528</td></tr><tr><td>Outer East Corner</td><td>51.60415</td><td>-3.86438</td></tr><tr><td>Inner East Corner</td><td>51.60495</td><td>-3.86323</td></tr><tr><td>Inner West Corner</td><td>51.60527</td><td>-3.86383</td></tr></table></td><td>Intertidal, sandy area.</td><td>None known (NBN Atlas, 2026, see Appendix 1).</td></tr>
</table>

<table>
<tr><td></td><td></td><td></td><td></td><td></td><td></td><td>precautionary medium risk level has been assigned.</td></tr>
<tr><td rowspan="2">Transfer of marine INNS in dredge material and residual water</td><td>Source</td><td>Outer Dredge Area
<table><tr><th>Vertex</th><th>Latitude</th><th>Longitude</th></tr><tr><td>Outer West Corner</td><td>51.60465</td><td>-3.86872</td></tr><tr><td>Outer East Corner</td><td>51.60415</td><td>-3.86745</td></tr><tr><td>Inner East Corner</td><td>51.60640</td><td>-3.86420</td></tr><tr><td>Inner West Corner</td><td>51.60697</td><td>-3.86537</td></tr></table></td><td>Intertidal, sandy area.</td><td>None known (NBN Atlas, 2026, see Appendix 1).</td><td rowspan="2">Medium</td><td rowspan="2">The Inner Dredge Area and Outer Low Water Disposal Area are in close proximity, have similar intertidal sandy habitats, and are hydrodynamically connected by tidal currents.

The marine non-native species (NNS) Austrominius modestus (barnacle) was recorded in the Outer Dredge Area in 2003 (NBN Atlas, 2026, see Appendix 1) but has not been recorded in the Outer Low Water Disposal Area.

A. modestus could be spread if adults or early life stages are entrained within the dredge material (including residual water, shells and rocks) removed from the Outer Dredge Area and released at the Outer Low Water Disposal Area.

A. modestus is widespread along the Welsh coast, and the dredge and disposal areas are naturally connected by tidal currents. Natural dispersal between these areas is therefore possible, meaning the risk of the activity</td></tr>
<tr><td>Receiving</td><td>Outer Low Water Disposal Area
<table><tr><th>Vertex</th><th>Latitude</th><th>Longitude</th></tr><tr><td>Outer West Corner</td><td>51.60450</td><td>-3.86528</td></tr><tr><td>Outer East Corner</td><td>51.60415</td><td>-3.86438</td></tr><tr><td>Inner East Corner</td><td>51.60495</td><td>-3.86323</td></tr><tr><td>Inner West Corner</td><td>51.60527</td><td>-3.86383</td></tr></table></td><td>Intertidal, sandy area.</td><td>None known (NBN Atlas, 2026, see Appendix 1).</td></tr>
</table>

						contributing to the spread of the species, beyond that which could occur through existing natural pathways, is considered low. However, as dredged material, will be physically moved between areas, a precautionary medium risk level has been assigned.

Please add more rows if necessary

B.3 Assessing the pathway risks associated with biological material

B.3.1 Please provide information about the species that will be used or transferred through the licensed activity and the potential for INNS to be contained in the biological material.

N/A

B.3.2: Please provide information about the source and receiving environments for biological material used or transferred through the licensed activity. Pathways include, for example, transfer of seeded ropes with seaweed or shellfish.

Pathway	**Location (coordinates, WGS84) and / or name of culture facility**		**Relevant environmental conditions for INNS species** (e.g. salinity and depth differences between source and receiving environments)	**List of INNS known to be present in the location or culture facility**	**Risk Level (High, Medium or Low)**	**Justification of risk level**
	Source					
	Receiving					
	Source					
	Receiving					

B.3.3. If a relevant pathway is identified in Table B.3.2, please outline any relevant biosecurity measures or protocols in place to prevent contamination of material by marine INNS, and introduction or spread of marine INNS.

N/A

B.3.4. Does the transfer have the relevant documentation from the Fish Health Inspectorate at CEFAS (Aquaculture Production Business Registration), or follow other relevant codes of conduct for prevention of the introduction or spread of marine INNS? Please place an X in the relevant box.

Yes	No	Don't know	Not relevant

B.4 Assessing the pathway risks associated with immersible equipment

B.4.1. Please list the immersible equipment expected to be used in this licensed activity in the box below.

Excavator bucket and vehicle wheels may be immersed.

B.4.2. Will all the immersible equipment used in this licensed activity undergo washing, rinsing and / or drying as part of routine maintenance at the times described below? Please place an X in the relevant box.

	Yes	No
Immediately prior to departing the port of origin to undertake the licensed activity.	x	
Immediately prior to leaving the licensed activity area on completion of the licensed activity.	x	

B.4.3. Will all the immersible equipment used in this licensed activity undergo washing, rinsing and / or drying between different deployments within the activity area of this licensed activity (e.g. different specific locations of dredging or sampling covered under this marine licence)? Please place an X in the relevant box.

Yes	No (please provide reason)
x	

If you answer No to any of the questions in B.4.2 or B.4.3, then please complete B.4.4 below.

B.4.4. Please provide information on the previous location the equipment will have been used prior to the vessel being used for this licensed activity.

Equipment	Location (Coordinates, WGS84)	Risk Level (High, Medium or Low)	Justification of risk level

B.5 Assessing other pathway risks

B.5.1 Please provide any other information on the licensed activity that may produce a risk of the introduction or spread of marine INNS that is not covered in the sections above.

Pathway	Risk Level (High, Medium or Low)	Justification of risk level
Transfer of Marine INNS on vehicles and equipment (dump truck and land-based excavator).	Medium	Vehicles and equipment are land-based though some components may be immersed or partially immersed (see above). Vehicles and equipment will therefore come into contact with sediment and water. *A.modestus* has been recorded close to the vehicle storage site, along the intertidal haul routes and within the Outer Dredge Area. This species is not considered high impact or invasive. This species could be spread if adults or early life stages become attached to vehicles or equipment, or are transported within residual water or sediment (including shells and rocks) retained on tyres, tracks, buckets or other equipment and subsequently released at another site. *A. modestus* is widespread along the Welsh coast, and the intertidal haul routes and dredge and disposal areas are naturally connected by tidal currents. Natural dispersal between these areas is therefore possible, meaning the risk of the activity contributing to the spread of the species, beyond that which could occur through existing natural pathways, is considered low.

Pathway	Risk Level (High, Medium or Low)	Justification of risk level
		The marine INNS *Crepidula fornicata* (slipper limpet) has been recorded in close proximity to the Outer Low Water Disposal Area, within approximately 300 m (NBN Atlas, 2026, see Appendix 1). This species is considered high impact. This species could be spread if adults or early life stages become attached to vehicles or equipment, or are transported within residual water or sediment retained on tyres, tracks, buckets or other equipment and subsequently released at another site. Although records are outside the dredge areas, disposal area and haul route, its proximity to the works means there may be potential for incidental transfer on vehicles and equipment operating in the intertidal environment. *Hippophae rhamnoides* (sea buckthorn) has also been recorded in close proximity to the Inner Dredge Area (NBN Atlas, 2026, see Appendix 1). Although this species is not classified as a marine INNS, as it occurs within upper shore and terrestrial habitats rather than the marine environment, it is recognised as a high-impact INNS in coastal habitats. Seeds or plant material can attach to vehicles or equipment, or become trapped within residual soil or vegetation retained on tyres, tracks, buckets or other equipment. There is therefore potential for the inadvertent transfer of this species on vehicles and equipment associated with the works. However, *H. rhamnoides* is not known to occur within the dredge areas, disposal area or along the haul routes, and therefore the likelihood of the activity contributing to its spread is considered low. Overall, a precautionary risk of medium has been assigned to the movement of equipment and vehicles.
Transfer of Marine INNS on operative's PPE	Medium	PPE, including boots and gloves, may come into contact with intertidal sediments and standing water during the works. Similar to transfer on vehicles and equipment, adult and early life stages of species relevant to the area

Pathway	Risk Level (High, Medium or Low)	Justification of risk level
		(*A. modestus*, *C. fornicata* and *H. rhamnoides*) may be transferred to new locations in sediment, vegetation and water, attached to or trapped in PPE and subsequently released. Overall, a precautionary risk of medium has been assigned to the transfer of marine INNS on PPE.

Section C: Management Measures

C.1 Management Measures

Enter the management measures for the pathways identified in the sections above.

All **high and medium risk** pathways identified in the previous risk assessment (sections B.1 to B.5) should have some degree of additional control or mitigation measures. Low risk pathways may also need additional control or mitigation measures. You may want to consider keeping a logbook to help demonstrate compliance if this is requested.

Pathway (identified in sections above)	**Risk Level (High, Medium or Low)**	**Risk management measure/s**	**Risk level after management (High, Medium or Low)**
Transfer of marine INNS in dredge material and residual water	Medium	Dredged material, including any residual water, will only be removed from the defined Inner and Outer Dredge Areas and transported directly to the consented Outer Low Water Disposal Area using the agreed haul routes. Unnecessary disturbance or movement of sediment or standing water outside these areas will be avoided. Operators will visually check dredged material, excavator buckets, dump truck beds and working areas for obvious attached organisms, shell material or unusual biological material during the works If suspected marine INNS, including *C.fornicata*, are observed during these checks, the Biosecurity Manager (see D.1 additional	Low

Pathway (identified in sections above)	Risk Level (High, Medium or Low)	Risk management measure/s	Risk level after management (High, Medium or Low)
		measures) will be informed. The material will not be moved until the observation has been reviewed and appropriate action agreed, if necessary. Dredged material will be transported and deposited in a controlled manner which minimises spillage. Any material spilled outside the defined access route or disposal footprint will be contained or recovered where practicable and safe.	
Transfer of Marine INNS on vechicles and equipment (dump truck and land-based excavator).	Medium	Vehicles and equipment, including dump trucks and land-based excavators, will be clean and dry prior to deployment and will be cleaned and dried following completion of each dredging event. Vehicles and equipment will remain within the defined haul routes, and dredge and disposal areas during each dredging event. During the works, operators will visually inspect vehicles and equipment for retained sediment, attached organisms, or unusual biological material. Any retained sediment or biological material will be removed prior to moving to another work area, where safe and practicable.	Low

Pathway (identified in sections above)	Risk Level (High, Medium or Low)	Risk management measure/s	Risk level after management (High, Medium or Low)
Transfer of Marine INNS on operative's PPE	Medium	PPE, including boots, will be checked, cleaned and dried prior to, and following each dredge event. Personnel will remain within the defined haul routes, dredge areas and disposal area wherever practicable. Operatives will visually inspect PPE for retained sediment, , attached organisms or unusual biological material before leaving the working area. Any visible material will be removed where safe and practicable before moving to another location.	Low

Please add more rows if necessary

Section D. Recommendations

You may want to consider how compliance with the management measures will be recorded, for example in a log book or via photos.

We also recommend that;

- You identify an individual for monitoring and reporting on biosecurity management plan actions (a biosecurity manager)
- All staff involved in the licensed activity are made fully aware of the possibility that INNS may be encountered and understand what measures will be taken to ensure surveillance / monitoring of INNS during the activity
- All relevant staff are adequately trained in the identification and detection of INNS and to report any instances to the biosecurity manager

D.1 Additional measures

1. A biosecurity manager will be appointed for the works.
2. Operators will be made aware of the potential impacts of marine INNS and of those species relevant to the area, namely *C. fornicata* (see Appendix 2 for a *C. fornicata* factsheet, including identification information, which can be shared with operators). Operators will also be made aware of the importance of biosecurity management measures, including the application of the Check, Clean, Dry principle to PPE and equipment used during the works (see Section C and Appendix 3, Check, Clean, Dry poster).
3. A simple checklist will be provided to operators to record the completion of necessary management measures (See Appendix 4 for example checklist).
4. The Biosecurity Manager will log any suspected marine INNS sightings by operators, action taken, and also submit records via iRecord or similar reporting platform, as appropriate (see Appendix 5, for example log form).

Appendix 1 Marine INNS records

Please see next page.

APEM Group

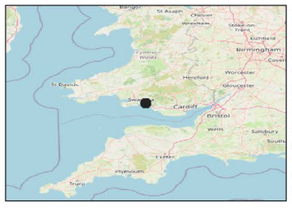
Port of Neath Marine License Support

Non-native species records

-3.90 -3.88 -3.86 -3.84 -3.82

51.64 51.62 51.60 51.58

- Record search extent
- Austrominius modestus
- Crepidula fornicata
- Hippophae rhamnoides
- Inner Dredge Area
- Outer Dredge Area
- Outer Low Water Disposal Area
- Vehicle / Equipment Storage



Notes

Base map and data from OpenStreetMap and OpenStreetMap Foundation (CC-BY-SA). © https://www.openstreetmap.org and contributors.

Coordinate System: WGS 84

0 0.5 1 km

N

Date:	Drawn by:	Checked by:
18/08/2026	HT	PS

Riverview
A17 The Embankment Business Park
Heaton Mersey
Stockport
SK4 3GN
http://www.apemltd.com
+44 (0) 161 442 8938

APEM

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NBN Atlas occurrence download at NBN Atlas accessed on 17 August 2026:

SEWBReC (2026). NRW Regional Data: South East Wales Non-sensitive species. Occurrence dataset on the NBN Atlas. For more information: https://registry.nbnatlas.org/public/show/dr1935.

SEWBReC (2026). INNS Data: All Taxa (South East Wales). Occurrence dataset on the NBN Atlas. For more information: email info@sewbrec.org.uk, or https://registry.nbnatlas.org/public/show/dr866.

Natural Resources Wales (2026). Marine Intertidal Phase 1 Species Dataset from the Countryside Council for Wales 1996-2005. Occurrence dataset accessed through the NBNAtlas. For more information: https://registry.nbnatlas.org/public/show/dr1340.

Appendix 2 *Crepidula fornicata* ID sheet

NNSS
GB non-native species secretariat

www.nonnativespecies.org

Produced by Max Wade, Vicky Ames and Kelly McKee of RPS

Slipper Limpet

Species Description

Scientific name: *Crepidula fornicata*
AKA: American Slipper Limpet, Ewin mochyn (Welsh)
Native to: North-east US
Habitat: Wide range of habitats particularly in wave-protected bays, estuaries or sheltered sides of wave-exposed islands



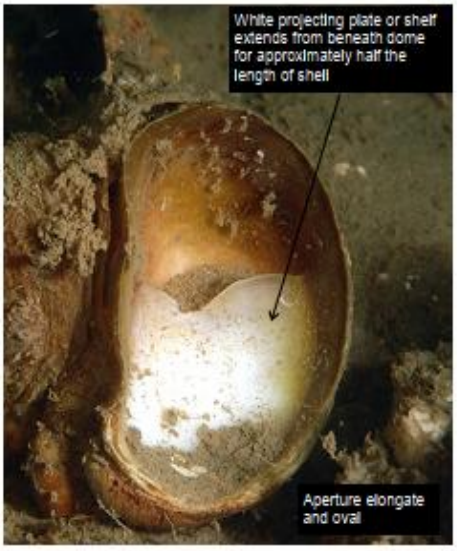
Slipper limpet has a whitish shell, sometimes marked with red patches. They can be variable in shape, but have a high, rounded dome curling towards the aperture, which is large and oval to kidney-shaped. The aperture is half-closed by a characteristic white projecting plate giving the slipper appearance. It normally lives in groups, forming curved chains of up to 15 animals, attached to stones and shells, and on sediment from the shore line that is permanently underwater down to 10m below the water.

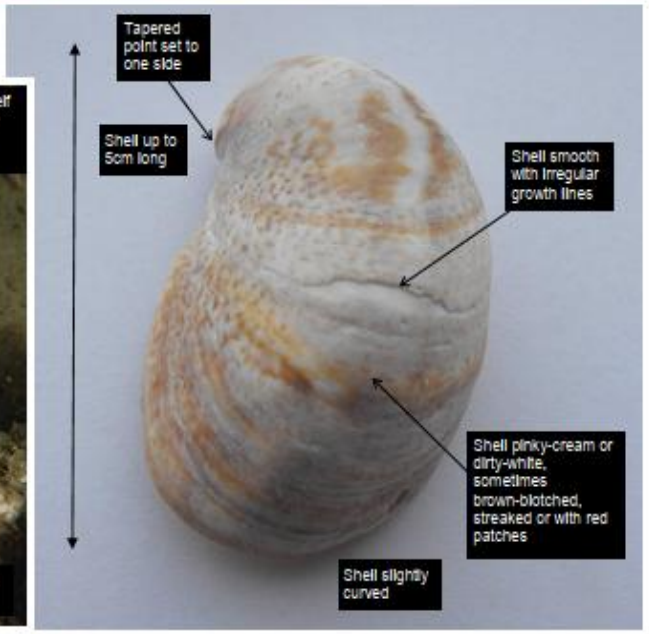
It was discovered in in Liverpool Bay in 1872, but this population has since died out. It was subsequently introduced to Essex between 1887 and 1890 with American Oysters *Crassostrea virginica* from north-east USA, it may also have been transported on ships' hulls and in ballast water when it is in the open-water larval phase. Since 1934, it has been found in silt brought into the UK with Dutch oysters, and is now abundant in the whole of the North Sea on oyster and mussel banks. Its numbers are continuing to increase. Slipper limpet competes with, and can displace, other filter-feeding invertebrates. The species can be a serious pest of oyster and mussel beds.

Slipper limpet is listed under Schedule 9 to the Wildlife and Countryside Act 1981 with respect to England and Wales. As such, it is an offence to plant or otherwise allow this species to grow in the wild.

For details of legislation go to www.nonnativespecies.org/legislation.

Key ID Features





Appendix 3 Check, Clean Dry poster



Appendix 4 Management measures checklist example

Date	Operator(s)	Marine INNS briefing completed	PPE clean / dry before use	Vehicles/equipment clean / dry before use	Working within approved access routes and work areas	No suspected INNS observed	If suspected INNS observed, Biosecurity Manager informed	PPE cleaned / dried after works	Vehicles/equipment cleaned / dried after works	Comments	Initials (sign-off)
		☐	☐	☐	☐	☐	☐	☐	☐		
		☐	☐	☐	☐	☐	☐	☐	☐		
		☐	☐	☐	☐	☐	☐	☐	☐		
		☐	☐	☐	☐	☐	☐	☐	☐		

Appendix 5 Suspected marine INNS reporting log example

Date	Location	Suspected Species	Description	Photograph Taken (Y/N)	Biosecurity Manager Notified (Y/N)	Action Taken