



gwerth mewn gwahaniaeth
delivering on distinction

Morlais Project

Document MOR/RHDHV/DOC/0075: Outline Invasive Non-Native Species Management Plan

Applicant: Menter Môn Morlais Limited

Document Reference: PB5034-ES-ISMP

Document MOR/RHDHV/DOC/0075: Outline Invasive Non-Native Species
Management Plan

Author: Royal HaskoningDHV



Morlais Document No.:
MOR/RHDHV/DOC/0075

Status:
Final

Version No:
F2.0

Date:
July 2019

© 2019 Menter Môn

This document is issued and controlled by:

Morlais, Menter Môn. Registered Address: Llangefni Town Hall, Anglesey, Wales, LL77 7LR, UK

Unauthorised copies of this document are NOT to be made

Company registration No: 03160233 Requests for additional copies shall be made to Morlais Project

TABLE OF CONTENTS

| | | |
|------|--|---|
| 1. | PROJECT DETAILS AND DESCRIPTION OF WORKS..... | 1 |
| 2. | WORK ELEMENTS COVERED BY THIS PLAN..... | 2 |
| 3. | INFORMATION RELATED TO THE ENVIRONMENTAL CONDITIONS AFFECTING BIOSECURITY | 3 |
| 4. | VESSEL TYPES WORKING ON SITE AND RISK FACTORS | 4 |
| 4.1. | DEPLOYMENT AND PORT HISTORY | 4 |
| 4.2. | INFORMATION RELATED TO ANY SLOW OR STATIONARY PERIODS OR CLIMACTIC CONDITIONS THAT MAY INCREASE BIOSECURITY RISK | 4 |
| 4.3. | SITE ACTIVITIES WHICH HAVE A SIGNIFICANT RISK OF INTRODUCING OR SPREADING INNS..... | 5 |
| 4.4. | POTENTIAL OF ACTIVITIES TO INCREASE THE RISK OF INTRODUCTION OR ONWARD SPREAD OF INNS..... | 5 |
| 4.5. | BIOSECURITY CONTROL MEASURES - INSTRUCTIONS FOR STAFF / CONTRACTORS / SITE USERS | 5 |
| 4.6. | SITE SURVEILLANCE AND REPORTING PROCEDURE | 5 |
| 4.7. | BIOSECURITY LOGBOOK..... | 6 |
| 4.8. | PLAN REVIEW..... | 6 |



1. PROJECT DETAILS AND DESCRIPTION OF WORKS

| | |
|-----------------------------|---|
| Development name | The Morlais Project (the Project) |
| Description of works | <p>A detailed project description is provided in Chapter 4, Project Description of the Environmental Statement.</p> <p>Construction and operation of the Morlais Project. Morlais is a 240 MW tidal energy project located to the west of Holy Island, Anglesey.</p> <p>The main elements of work to be undertaken include intertidal and vessel-based operations to undertake the following:</p> <ul style="list-style-type: none"> ▪ Horizontal Directional Drilling (HDD) and cable trenching in the intertidal and subtidal; ▪ Installation, maintenance and repair of export and inter-array cables; ▪ Installation of cable protection; ▪ Installation of seabed foundations, including drilled sockets and gravity base structures (GBS); ▪ Operation and maintenance; ▪ Repowering activities; ▪ Decommissioning works. |
| Work location | The works will occur in the Morlais Development Zone (MDZ) and Export Cable Corridor (ECC). Location of works is shown below. |
| Plan Period | XXXXXXXXXXXXXX to be completed XXXXXXXXXXXXXXXX |
| Biosecurity Manager | XXXXXXXXXXXXXX to be completed XXXXXXXXXXXXXXXX |



2. WORK ELEMENTS COVERED BY THIS PLAN

| Works | Location | Vessel |
|--|--|------------------------------------|
| XXXXX. Bullet pointed list of works to be undertaken | XXXXXX. Co-ordinates for box prescribing work area | XXXXXXXX. Vessel Name as available |
| | | |
| | | |

3. INFORMATION RELATED TO THE ENVIRONMENTAL CONDITIONS AFFECTING BIOSECURITY

| | |
|---|---|
| Salinity | Fully marine. No freshwater input. |
| Marine features present | <ul style="list-style-type: none"> ▪ Bedrock rocky reefs and mixed substrata ▪ Sabellaria based biogenic reef ▪ Coarse and highly exposed sediment |
| Invasive non-native species (INNS) known to be present near to the works area. | <ul style="list-style-type: none"> ▪ <i>Didemnum vexillum</i> (carpet sea squirt) has been found in Holyhead Marina. ▪ <i>Spartina townsendii</i> var. <i>anglica</i> (Common cord grass) has been found East of Trearddur and West of Llanfachraeth. ▪ <i>Asterocarpa humilis</i> (compass sea squirt) has been found in Holyhead Marina. ▪ <i>Sargassum muticum</i> (Japanese wireweed) has been found near Holyhead Maritime Museum, Penrhos Beach, near Four Mile Bridge and Trearddur Bay. ▪ <i>Undaria pinnatifida</i> (Wakame, Asian kelp) has been found at Holyhead Marina ▪ <i>Crassostrea gigas</i> (Pacific oyster) has been found at Holyhead Marina, Penrhos Bay and Cymyran Strait. ▪ <i>Caprella mutica</i> (Japanese skeleton shrimp) has been found in Holyhead Marina. ▪ <i>Schizoporella japonica</i> (a bryozoan) has been found in Holyhead Marina. ▪ <i>Styela clava</i> (leathery sea squirt) has been found in Holyhead Marina and near Holyhead Maritime Museum. |

4. VESSEL TYPES WORKING ON SITE AND RISK FACTORS

| Vessel name | Vessel type | Details and risk factors which may include: Known potential transmission pathways, Previous port / operation areas; Speed of passage to work area; Inspection history; Internal treatment history | Designation of risk (High / Medium / Low) |
|-------------------|-------------------------------------|---|---|
| E.g. MV work Boat | E.g. Monohull diving support vessel | Examples of potential factors. Vessel has been on hard standing for XX months. Vessel bilges have been cleaned before deployment. Vessel hull has been cleaned and antifouled. Previous work location was XXXX. The location has been assessed although XXXX INNS were present, these were freshwater species and cannot survive in marine environment. | Low |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

4.1. DEPLOYMENT AND PORT HISTORY

| Vessel name | Port of origin | Ports visited in 6 months before deployment on site | Date and duration |
|------------------|----------------|--|-------------------|
| e.g. MV Workboat | Swansea | Liverpool Prior to deployment the vessel spent 3 months on hard standing. | XXXXXX to XXXXXX |
| | | | |
| | | | |

4.2. INFORMATION RELATED TO ANY SLOW OR STATIONARY PERIODS OR CLIMACTIC CONDITIONS THAT MAY INCREASE BIOSECURITY RISK

1. E.g. Vessels will be moored within Holyhead port during down-time between surveys. This stationary time will not be significant (days to 1-2 weeks non-continuous during the survey period).

2. E.g. Vessels will be hauled out of the water before being transported to their home port and as such any biofouling occurring during slow or stationary periods will be removed.

4.3. SITE ACTIVITIES WHICH HAVE A SIGNIFICANT RISK OF INTRODUCING OR SPREADING INNS

| Activity | Management measure |
|---|---|
| E.g. Diving equipment has been recently used in another location and not cleaned. | All equipment will be cleaned before use. |
| | |
| | |

4.4. POTENTIAL OF ACTIVITIES TO INCREASE THE RISK OF INTRODUCTION OR ONWARD SPREAD OF INNS

3. E.g. If vessels and equipment are not checked and clean before arriving and being used at the port they may introduce new INNS to the area.
4. E.g. Vessels should also be checked and cleaned before leaving the port to ensure that any INNS that may have settled are not taken and introduced to the vessels home port area.

4.5. BIOSECURITY CONTROL MEASURES - INSTRUCTIONS FOR STAFF / CONTRACTORS / SITE USERS

| Who? | What? | Where? | When? |
|--------------|--|-------------------|------------------------------|
| All | Report all potential INNS recorded during work. | Vessel | Any time |
| Project Team | Confirm reported INNS, record and report to regulator | Regulator office | As required |
| Vessel Owner | Ensure maintenance of bio-foul paint systems, hull cleaning and inspection. | Management office | As required |
| Vessel Owner | Wash down vessel before transporting to new destination. | Vessel | Prior to departure from port |
| Vessel Owner | Visually inspect vessel prior to departure and report any INNS Project Team, including where the vessel has been within the work area, and where it has been moored. | Management office | Prior to departure from port |

4.6. SITE SURVEILLANCE AND REPORTING PROCEDURE

5. All vessel crew instructed to report any potential INNS found when surveying.
6. INNS identification material will be provided to vessels by Project Team.



7. Photographs of potential INNS will be supplied to NRW who will identify. If INNS confirmed, this is recorded and reported to the Great Britain Non-native NNS Secretariat and other stakeholders such as Holyhead and other local ports.

4.7. BIOSECURITY LOGBOOK

8. A logbook detailing assessments undertaken and potential INNS reported will be maintained by the Project Team.

4.8. PLAN REVIEW

9. The plan will be reviewed at each stage of project construction, or on a six month basis, whichever is sooner, for duration of works within the MDZ.