

MARINE BIOSECURITY PLAN FOR FAIRLIE COASTAL PATH

1. Scene setting

This Biosecurity plan has been prepared following consultation with the Marine Directorate as part of the Marine Licence process which raised a concern regarding the possible presence of the invasive non-native species *Didemnum vexillum* or carpet sea squirt, which is known to be present in Fairlie.

- **What are Invasive Non-Native Species (INNS)?** *Invasive Non-Native Species are those that have been transported outside their natural range and that damage our environment, the economy, our health and the way we live.*
- **What is Biosecurity?** *Biosecurity means taking steps to make sure that good practices are in place to reduce and minimise the risk of spreading invasive non-native species. A good biosecurity routine is always essential, even if invasive non-natives are not always apparent.*
- **What is a Vector or Pathway?** *These are the means by which a species is moved from place to place due to human activity.*

2. Introduction

- **Biosecurity Manager/Officer or responsible person or organisation/group:** Contractor (to be appointed).
- **Plan duration and review date:** End of construction period
- **Location of activity:** Fairlie, North Ayrshire
- **Machinery or materials to be used:** Construction plant and vehicles, temporary formwork, security fencing, concrete, steel etc.
- **Transport routes for machinery and materials:** Transport routes will be along existing paths and beach shorefront at low tide.
- **Critical control points:** Vehicle entry points to the site

3. Environmental information:

<p>Site description</p> <p>Site consists of rocky shoreline and existing coastal path which has eroded in sections. The east of the site is generally bounded by sea walls to the adjacent properties with occasional access lanes. The beach is shallow sloping and sandy in nature.</p>
<p>Tidal, salinity, stratification information</p> <p>The proposed works are mostly above MHWS however some areas are in the tidal zone (but all well above MLWS).</p>
<p>Sensitive habitats and protected features/areas</p> <p>None within site area. Southannan Sands SSSI is located to the south.</p>
<p>Known environmental management measures</p> <p>n/a</p>
<p>Condition assessment (if available)</p> <p>n/a</p>
<p>INNS known to be present</p> <p>Carpet Sea Squirt (<i>Didemnum vexillum</i>) present in Largs and Fairlie</p>
<p>INNS likely to be of concern (horizon scanning)</p> <p><i>Didemnum vexillum</i> or carpet sea squirt, which is known to be present in Fairlie. Carpet Sea Squirt is predominantly a subtidal species though may also occur in the intertidal area. Text from Non-Native Species Secretariat (NNSS) states the this species is “Recorded in GB only from marinas and adjacent shallow artificial structures usually at depths from 30 to 65m at salinities > 26 ppt and temperatures of -2oC to 24oC. In other areas of introduction, also occurs on natural cobble or gravel seabed to 80m depth, in tide pools on shore, in seagrass beds and on bivalve aquaculture installations.” Therefore, while this species is subtidal it may be present intertidally. This species is known to be present in Fairlie (in Fairlie Quay Jetty and Fairlie Moorings) and therefore, could very likely be present in any rockpools adjacent to the site.</p>

4. Activity risk

Activity	Risk Factors
Earth/rock movement	It is possible to transfer INNS on these materials
Breakout of rock	<i>D. vex</i> may be present in rockpools
Relocation of equipment, e.g. formwork	Movement of equipment has potential to disturb and spread INNS
Jetwashing	Spreading of species into the marine environment

5. Biosecurity Actions/Control Measures

Who	Biosecurity Action
Contractor	Plant or machinery (excavators) will generally not be permitted to enter the water, however, should this become necessary, such plant must first be thoroughly washed and checked. Use fresh, hot water if possible. Wash onto hard standing, preferably into an interceptor system. Do not allow any water to return to the sea.
Contractor	Raise awareness – provide INNS identification guides to staff and display in site compound
Contractor	Air dry – most, if not all, marine and aquatic INNS will be killed by being dried out – identify opportunities to dry out equipment or infrastructure as often as possible
Contractor	All work equipment and PPE to be subject to the following prior to first arrival on site and before leaving the site at any time: <ul style="list-style-type: none">• Check work equipment, footwear and clothing for live organisms• Clean & wash work equipment, footwear and clothing thoroughly. Use hot freshwater where possible. Ensure any biological material is disposed of in a way that does not make its way to the marine environment.• Dry all work equipment, footwear and clothing.• Do not transfer water from one location to another.

6. Monitoring

Prior to works commencing on site and prior to works extending to a new area, a site walkover is to be carried out to identify any potential instances of *D. vex* habitats, such as deep rock pools

Any potential habitat to be recorded and reviewed by a marine ecologist. Any likely or suspected instances of *D. vex* are to be reported to the Marine Directorate Licensing Operations Team via the contact details below in Section 7.

In their role as NEC *Supervisor*, AECOM will check the awareness of INNS with the Contractor's on site personnel and encourage the reporting of possible INNS.

The potential encountering of INNS will be added to the project's Early Warning Register and reviewed at least every two weeks regularly under processes within the NEC4 Contract.

7. Contingency plan

Responsibilities:

In the event that *D. vex* or suspected *D. vex* is identified on site, works in that area should be stopped immediately to avoid disturbing it. The finding should be reported to the Marine Directorate via the details below to agree how best to proceed. The Contractor should also contact the Client (North Ayrshire Council and NEC *Project Manager* and *Supervisor* and raise a formal Early Warning via the NEC4 process.

Contact details:

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