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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:	Valero Pembrokeshire Oil Terminal Ltd.
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)*	Valero Pembrokeshire Oil Terminal (VPOT) Ltd plans to improve the structural integrity and functionality of Jetty Berth 2, which is situated within the Milford Haven Waterway. Over time, the existing dual pile mooring dolphin (BD7) has become loose in its socket. To ensure safe and efficient berthing operations, VPOT Ltd has decided to remove the deteriorating dual piles and replace them with a modern monopile system (hereafter referred to as the 'Project'). The works associated with the Project are currently planned to commence in October 2025 and be completed over a period of approximately 3 to 4 weeks. The Project consists of the following three licensable activities: • Demolishing the existing dual pile dolphin structure. These will be transported to the Valero Quay facility in Pembroke Dock for disposal/recycling. • Installation of a permanent casing for a new monopile. This will be adjacent to one of the dual piles but largely within the footprint of the BD7 platform. • Installation of a new monopile within this casing including grouting and cementing of the monopile within the casing (up to 70 tonnes of grout may be used).
Estimated timings of proposed licensed activities:	3 to 4 weeks

Section B: Risk Assessment

B.1 Assessing the pathway risks associated with vessels

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
Barge (OCM400)	August 2024 – November 2024 Birkenhead, Liverpool, UK December 2024 – June 2025 Pembroke Harbour, Pembroke, UK	INNS have been recorded in Birkenhead and/or Pembroke Harbour, including the following high risk species: • Carpet sea squirt *Didemnum vexillum* • Compass sea squirt *Asterocarpa humilis* • American slipper limpet *Crepidula fornicata* • Chinese mitten crab (*Eriocheir sinensis*) • Devil's tongue weed (*Grateloupia* • *turuturu*) The following medium risk species (among	No, the vessel does not have antifouling applied within period

		others) have also been recorded: • Japanese wireweed *Sargassum muticum* • Japanese skeleton shrimp *Caprella mutica*	
Crane barge (Lara 1)	The Lara 1 has only been in UK and Irish waters for the past five years. See row below for all ports and locations that the Lara 1 has visited in the last 12 months.	INNS have been recorded in the ports listed in the row below, including the following high risk species: • Carpet sea squirt *Didemnum vexillum* • Compass sea squirt *Asterocarpa humilis* • American slipper limpet *Crepidula fornicata* The following medium risk species (among others) have also been recorded: • Japanese wireweed *Sargassum muticum* • Japanese skeleton shrimp *Caprella mutica* These species have also been recorded in the Milford Haven Waterway, wherein the Project is located.	Last antifouling was on 28th September 2023, thus within 24 months.

Port call NR	Date of Arrival	Date of Departure	Country	Port Loc code	IMO Port Facility	Port Name	Port Facility name	Sec Level
1	26/06/2025		GB	GBLIV	0001	Liverpool	Canada dock1	1
2	21/06/2025	24/06/2025	IE	IEWAT	0001	Waterford	Creadan Bay	1
3	07/06/2025	19/06/2025	GB	GBLIV	0001	Liverpool	Canada dock1	1
4	05/06/2025	06/06/2025	GB	GBBIF	0001	Barrow in Furness	Ramsden dock	1
5	18/04/2025	05/06/2025	GB	GBLIV	0001	Liverpool	Canada dock1	1
6	16/04/2025	17/04/2025	GB	GBBIF	0001	Barrow in Furness	Ramsden dock	1
7	09/01/2025	15/04/2025	GB	GBLIV	0001	Liverpool	Canada dock1	1
8	04/01/2025	09/01/2025	GB	GBHLY	0001	Holyhead	Stena	1
9	21/09/2024	04/01/2025	GB	GBLIV	0001	Liverpool	Canada dock1	1
10	17/09/2024	21/09/2024	GB	GBHLY	0001	Holyhead	Stena	1

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
Barge (OCM400)	Low	Although barge (OCM400) has not had any antifouling/biocidal treatment within the last 24 months, the barge is currently in the Milford Haven Waterway. Furthermore, the barge has only visited one other nearby UK port (Birkenhead) within the last year. There are already a wide range of high and medium risk INNS present within the Milford Haven Waterway (where the Project works will be located) and so the barge poses of low risk of introduction of INNS that are not already present in vicinity of the licensed activity location (i.e. the Milford Haven Waterway).
Crane barge (Lara 1)	Low	While the Lara 1 has visited nearby ports in the western UK and Ireland where INNS have been recorded, there are also a wide range of high and medium risk INNS present within the Milford Haven Waterway (where the Project works will be located). Further, the Lara 1 has had antifouling within the past 24 months, further reducing the risk.

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)**
Barge (OCM400)	None	Low
Crane barge (Lara 1)	None	Low

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

Not relevant to the proposed activities at the Valero Pembrokeshire Oil Terminal jetty.

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).

Pathway	**Location (including Coordinates, WGS84)**		**Relevant Environmental Conditions for INNS species** (e.g. salinity and depth differences between source and receiving environments)	**List of INNS known to be present**	**Risk Level (High, Medium or Low)**	**Justification of risk level**
	Source					
	Receiving					
	Source					
	Receiving					
	Source					
	Receiving					

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.

Not relevant to the proposed activities at the Valero Pembrokeshire Oil Terminal jetty.

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					

Please add more rows if necessary

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
			X

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.

The only immersible equipment to be used will be drilling equipment.

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 The drilling equipment has been out of the marine environment for over 24 months prior to the licensed activity. It will still be pressure washed before undertaking the licenced activity.	

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 Not relevant, as the drilling equipment will only be deployed in one location within the activity area for the licensed activity.

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**
N/a The drilling equipment has been out of the marine environment for over 24 months prior to the licensed activity			

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**
None applicable	N/a	N/a

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)**
Vessels	Low	No additional measures other than those already described required.	No change.
Non-biological materials and water	N/a		
Biological material	N/a		
Immersible equipment	Low	No additional measures other than those already described required.	No change.

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