BIO-SECURITY PLAN SOSPAN DAU

Client Name : **Milford Haven Port Authority**
Project Location : **Milford Haven**
Project Number : **60,240**

Revision Status

Rev	Issue Date	Reason for Issue	Prepared	Checked
1.0	03/07/24	FOR TENDER	NANC	KDEE
2.0	07/08/24	REVISED	PKER	RKID
3.0				

1 This document contains:

A. Bio-security template of the TSHD Sospan Dau.
B. Risk Factor Table Sospan Dau
C. International anti fouling certificate TSHD Sospan Dau
D. Hempel TBT free Quality Certificate

2 INTRODUCTION

2.1 Purpose of document

The purpose of this Project Bio-Security Plan is to set out the specific policies, practices, resources, and activities relevant to the upcoming Pembroke Power Station maintenance dredging campaign. This plan ensures that the contractual requirements and applicable regulatory requirements are met, and encourages high environmental standards amongst all employees.

This document forms part of the Boskalis Way of Working, the integrated quality management system applicable to all operations in Boskalis. The Boskalis Way of Working is structured around four Phases as pictured below. The Project Bio-security Plan is typically prepared in the PLAN Phase and may be updated in the EXECUTE Phase.

2.2 Project information

The scope of work includes the maintenance dredging of the Pembroke Power Station Approaches.

Our small modern trailer dredger 'Sospan Dau' is best suited for the maintenance dredging campaign within Milford Haven, being highly manoeuvrable and capable of sailing independently to the licensed disposal area, located approximately 19 nautical miles southwest of the Haven Entrance. The loaded draft of the ‘Sospan Dau’ is 3.3m allowing the vessel to dredge safe in the access channel.

The gross dredging volume is estimated at 32,800m^3.

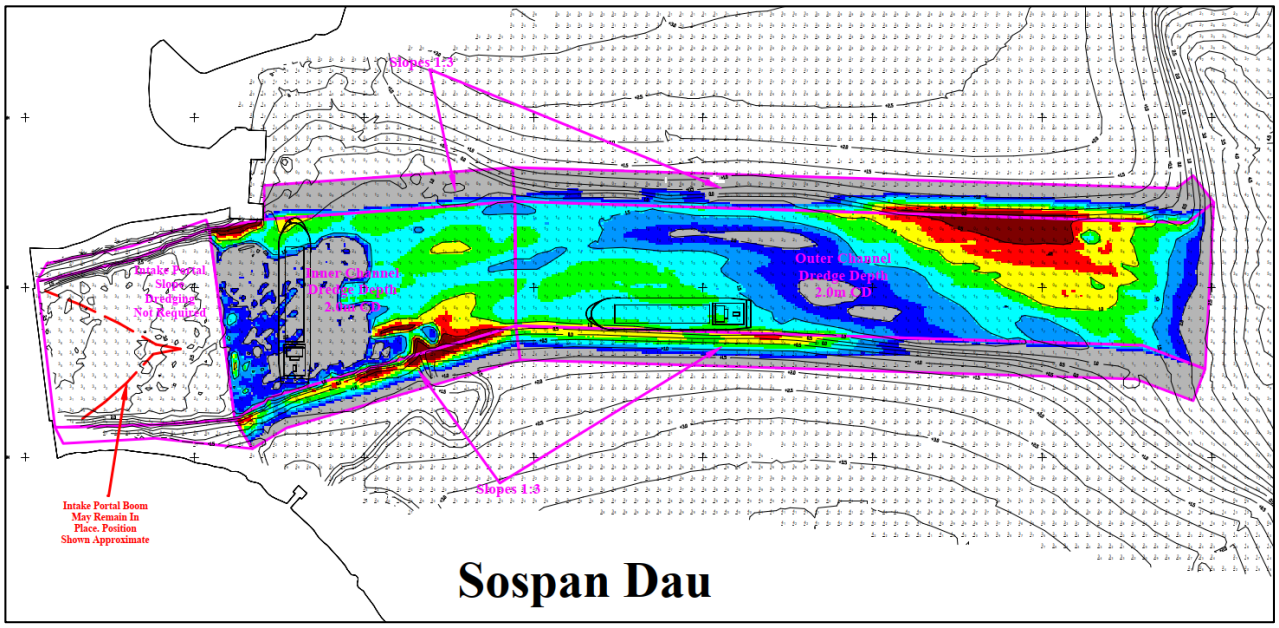
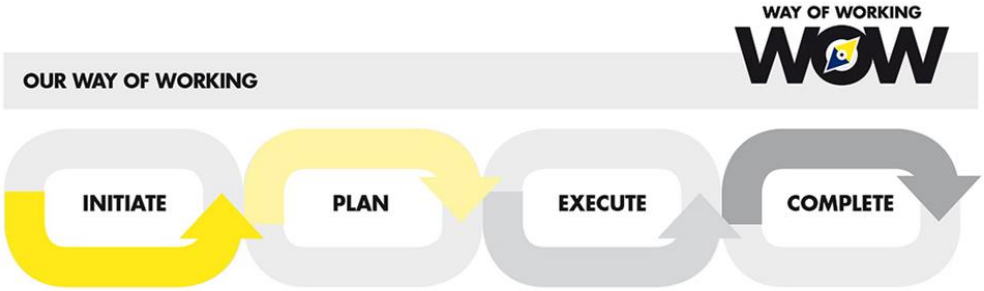


Figure 1 - Dredge Areas with Sospan Dau Overlaid

2.3 Document scope.

Our Project Bio-security Plan sets out the specific policies, practices, resources, and activities relevant to the Milford Haven maintenance dredging campaign. The plan ensures that the contractual requirements, applicable regulatory requirements as well as Boskalis requirements are met, and to encourage high standards of safety, health, and environmental standards amongst all employees.

This document forms part of the Boskalis Way of Working, the integrated quality management system applicable to all project operations in Boskalis. The Boskalis Way of Working is structured around four Phases as outlined in the pictured below. This Project Plan is typically prepared in the PLAN Phase of a project, where the main implementation is taking place in the EXECUTION Phase.



More detailed information about the Boskalis Way of Working can be found in the Group Manual and the User Guide. A dedicated website with all supporting materials is available at wow.boskalis.com.

2.4 Plan ownership, change management, approval and distribution.

The Project Manager is the document owner and is responsible for the contents of the Bio-security Plan, ensuring the content is up to date and that only authorised and updated versions are in circulation. The Project SHE Plan, which this Bio-security Plan is a part of, is a dynamic document and reviews may take place and updates prepared as and when required.

Revision to the Project SHE Plan can be initiated by the following processes:

- Changes in legislation
- Changes in design and/or work methods
- Major scope and schedule changes
- Results from risk assessments
- Results from audits (external & internal)
- Results from management reviews
- Results from Client inspections/reviews
- Changes in the Boskalis Way of Working

3 Bio-security Template – Shoalway

1. Name of vessel	**Sospan Dau**	
2. Vessel Type	**Trailing Suction Hopper Dredger**	
3. IMO no.	**7711062**	
4. Flag State of vessel	**Dutch**	
5. Last Port of call **Cardiff**	6. Date of Arrival **01/08/25**	7. Date of Departure **TBC (Expected 15/08/25)**
8. Date of last anti-fouling coating: **17-04-2024**		
9. Has the vessel arrived from country / region with similar environmental conditions? **Yes**		
10. Does the vessel have noticeable clumps of algae clinging to visible parts of the hull? **No**		
11. Does the vessel spend long periods of time stationary at sites in between anti-fouling treatments? **No**		
12. Is the vessel 'slow moving', such as a construction barge or drilling rig? **No**		
13. State the date / time / location when the ballast water flushing procedures have been carried out. **N/A no ballast system on board**		
14. State the date / time / location when the vessel was thoroughly flushed at the end of the previous dredging project. **Not known yet, will be end of Cardiff Maintenance Dredging.**		

Vessel's Port Call or Project Locations of the last 12 months:	
Period:	**Location:**
13-10-24 to 19-10-24	Lowestoft (UK)
19-10-24 to 21-10-24	Newhaven (UK)
03-11-24 to 09-11-24	Dordrecht (Netherlands)
10-11-24 to 13-11-24	Harwich (UK)
14-11-24 to 18-11-24	Portsmouth (UK)
19-11-24 to 01-12-24	Fawley (UK)
03-12-24 to 10-12-24	Drogheda(Ireland)
11-12-24 to 03-01-25	Burry Port (UK)
07-01-25 to 13-01-25	Newhaven(UK)
13-01-25 to 16-01-25	Shoreham(UK)
16-01-25 to 17-01-25	Newhaven (UK)
18-01-25 to 21-01-25	Harwich(UK)
21-01-25 to 23-01-25	Newhaven(UK)
23-01-25 to 24-01-25	Shoreham (UK)
25-01-25 to 25-01-25	Newhaven (UK)
26-01-25 to 29-01-25	Shoreham (UK)
30-01-25 to 06-02-25	Fawley (UK)
08-02-25 to 17-02-25	Burry Port (UK)

18-02-25 to 28-02-25	Cardiff (UK)
01-03-25 to 08-03-25	Burry Port (UK)
10-03-25 to 16-03-25	Drogheda (Ireland)
19-03-25 to 28-03-25	Portsmouth (UK)
29-03-25 to 02-04-25	Harwich (UK)
04-04-25 to 13-04-25	Sovereign Harbour, Eastbourne (UK)
13-04-25 to 14-04-25	Newhaven (UK)
14-04-25 to 21-04-25	Shoreham (UK)
24-04-25 to 25-05-25	Burry Port (UK)
27-05-25 to 14-06-25	Barrow-in-Furness (UK)
15-06-25 to 23-06-25	Rosslare Europort (Ireland)
24-06-25 to 11-07-25	Burry Port (UK)
12-07-25 to 30-07-25	Workington (UK) - Planned
01-08-25 to 15-08-25	Cardiff (UK) - Planned

		Risk of Marine Non-Native		
		High	Medium	Low
1.	Has the vessel/ equipment just arrived from the local area?			Local (Irish Sea)
2.	Has the vessel/ equipment had an anti-fouling coating applied to submerged structures within the last 12 months (or time recommended by manufacturer)?			Yes
3.	Are all the visible submerged surfaces free of bio fouling (a green ‘slime’ is OK)?			Yes
4.	Do the visible submerged surfaces have more than a green ‘slime’ coating?			No
5.	Does the vessel/ equipment have noticeable clumps of algae and/ or animals clinging to the visible parts of the hull/ rudder/ propeller?			No
6.	Has the vessel/ equipment just arrived from another country, region, or water body with similar environmental conditions (e.g., seawater temperature)?			Yes (Cardiff)
7.	Has the vessel/ equipment just arrived from a water body known to have marine NNS present?			No
8.	Does the vessel/ equipment spend long periods of time stationary at sites in between anti-fouling treatments?			No
9.	Is the vessel ‘slow moving’, such as a construction barge or drilling rig?			No

4 Risk Assessment and Mitigation Measures

To get a better understanding of the potential risks associated to the proposed operation it is important to outline a brief history of vessel/equipment movements.

Over the past 12 months, the 'Sospan Dau' has operated in the UK, the Netherlands (for a period of planned maintenance and certification), and east coast of Ireland, as detailed in the Vessel's Port Calls in Section 3. Given its operational areas, the general risk of environmental conditions affecting bio-security is considered low. However, it is important to note that there are differences in the composition of Invasive Non-Native Species (INNS) between the vessel's current location, the dredge area, and the disposal area. Below is a list of activities that have the potential to increase the risk of spreading (MINNS).

Activities with potential to increase risk of spreading MINNS

- Movement of vessel from one port to another
- Movement of vessel between dredge area and disposal area
- Main vectors by which spread can potentially occur.
- Attachment to hull or other parts of the vessel when visiting a location where MINNS are present.
- Within ballast water, used when vessel is moving between operational areas.
- When dredged material containing MINNS is deposited in a location where the species is not present.

Controls to Mitigate Risk

The Dredge Licence that is required prior to works commencing will be adhered to. Moreover, the international Ballast Water Management Convention (September 2017) will be adhered to.

Regular antifouling of vessel demonstrated through up to date logbook. Vessels are maintained within IMO guidelines. Measures include annual maintenance, check of anodes on the vessel that assist in preventing marine growth and thorough cleaning of vessel hull to remove any marine growth.

All vessels named on the licence will ensure that the hopper area and any associated equipment are flushed clean and free from residual sediments and debris before departure of the vessel(s) from the previous project.

Whilst the 'Sospan Dau' does not take ballast water in internal ballast tanks, the vessel may, dependent on the prevailing weather conditions and at the discretion of the vessel's Master, take on an amount of ballast water in the vessels hopper. Should this be the case then the vessel will discharge/exchange the water at the earliest opportunity and/or at the furthest point from land before reaching the new campaign destination. Any exchange of water must complete and least one full exchange cycle.

The length of time the vessels remain idle in the water will be minimised to prevent biofouling. All ship crew will be provided with identification guide to MINNS to allow for monitoring of invasive species. All findings will be reported immediately to MHPA Environment Officer, who will then liaise with NRW and Defra as necessary.

Certificate No: LR23147445AF
Issue Date: 01/07/2023
Expiry Date: 30/06/2026

Recognised IMO AFS Convention Compliant Anti-Fouling Paint

Manufacturer	**PPG Deco Polska Sp. z o.o**
Address	Oddział w Lewkowcu Lewkowiec Branch, Lewkowiec 68, Ostrow Wielkopolski, 63-400, Poland
Product	**SIGMA ECOFLEET 530**
Product Colours	Redbrown Brown Black Blue Spruce Green

This certificate is issued to the manufacturer named above. The anti-fouling paint is recognised to be compliant with the IMO International Convention on the Control of Harmful Anti-fouling Systems on Ships adopted in October 2001. This recognition does not cover other properties, such as anti-fouling performance, service life, safety or toxicity etc.

The recognition is subject to Lloyd's Register being informed of any changes in and modifications to the product's formulation or specification. Lloyd's Register reserves right to withdraw or re-issue this certificate upon any future amendments of the IMO Convention.

Heather Hughes

Team Leader - Non-Metallics to Lloyd's Register EMEA
A member of the Lloyd's Register group

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

CERTIFICATE

TBT-Free Antifouling

PPG Protective & Marine Coatings
hereby declares that **SIGMA ECOFLEET 530**
antifouling coating was applied on the entire underwater hull of:

SOSPAN-DAU - IMO No. **07711062**
of **Boskalis Westminster Ltd**
during April, 2024 at Neptune shipyard, in Hardinxveld-Giessendam, NL.

SIGMA ECOFLEET 530 is a TBT-free antifouling coating that complies with the terms of the IMO Convention on the Control of Harmful Antifouling Systems on Ships of 2001 (AFS/CONF/26).

SIGMA ECOFLEET 530, applied in the colour(s):
☐ Brown / ☒ Red-brown / ☐ Other:
is a one component, high performance TBT free self-polishing antifouling coating, containing the following active ingredients:

- Dicopper oxide — CAS no: 1317-39-1
- 4,5-Dichloro-2-octyl-2H-isothiazol-3-one — CAS no: 64359-81-5

The antifouling system was applied directly over:
a one component coating/sealer
supplied by PPG Protective and Marine Coatings

PPG Protective & Marine Coatings cannot be held liable for any consequences arising out of or in connection with the information provided in this certificate.

PPG Protective & Marine Coatings
Factory: Ostrow, Poland
Date: April 2024

CERTIFICATE

TBT-Free Antifouling

PPG Protective & Marine Coatings
hereby declares that **SIGMA ECOFLEET 530**
antifouling coating was applied on the underwater area of:

SOSPAN-DAU - IMO No. **7711062**
of **Baggerm. Boskalis BV**
during June, 2021 at Neptune shipyard, in Hardinxveld-Giessendam, NL.

SIGMA ECOFLEET 530 is a TBT-free antifouling coating that complies with the terms of the IMO Convention on the Control of Harmful Antifouling Systems on Ships of 2001 (AFS/CONF/26).

SIGMA ECOFLEET 530, applied in the colour(s):
☐ Brown / ☒ Red-brown / ☐ Other:
is a one component, high performance TBT free self-polishing antifouling coating, containing the following active ingredients:

- Dicopper oxide — CAS no: 1317-39-1
- 4,5-Dichloro-2-octyl-2H-isothiazol-3-one — CAS no: 64359-81-5

The antifouling system was applied directly over:
a one component coating/sealer
supplied by PPG Protective-Marine Coatings

The expected coating lifetime is 30 months from date of application.

PPG Protective & Marine Coatings cannot be held liable for any consequences arising out of or in connection with the information provided in this certificate.

PPG Protective & Marine Coatings
Ostrow, Poland
Date: June 2021

T-EF530-PL20-V3

Record of Anti-Fouling Systems

This record shall be permanently attached to the International Anti-Fouling System Certificate

	Particulars of ship
Name of ship	**SOSPAN DAU**
Distinctive numbers or letters	**PBAL**
IMO number	**7711062**
	Details of anti-fouling system applied
Type(s) of anti-fouling system(s) used	**TBT-free self polishing anti-fouling system**
Date(s) of application of anti-fouling system(s)	**June 2021**
Name(s) of company(ies) and facility(ies)/location(s) where applied	**Neptune Shipyards B.V., Hardinxveld Giessendam, The Netherlands**
Name(s) of anti-fouling system manufacturer(s)	**PPG Protective & Marine Coatings**
Name(s) and colour(s) of anti-fouling system(s)	**Sigma EcoFleet 530 Red-Brown**
Active ingredient(s) and their Chemical Abstract Service Registry Number(s) (CAS Number(s))	**Dicopper oxide (CAS no. 1317-39-1)** **4,5-Dichloro-2-octyl-2H-isothiazol-3-one (CAS no. 64359-81-5)**
Type(s) of sealer coat, if applicable	**Ravax ACP**
Name(s) and colour(s) of sealer coat applied, if applicable	**Ravax ACP**
Date of application of sealer coat	**May 2001**

This is to certify that this record is correct in all respects.

Issued at **Rotterdam** on **07 July 2021**

This document is signed electronically in accordance with IMO FAL.5/Circ.39/Rev.2 and takes precedence over any printed version.

Walter Machielsen
Surveyor to Lloyd's Register EMEA

a member of the Lloyd's Register group.

International Anti-Fouling System Certificate

(This certificate shall be supplemented by a Record of Anti-Fouling Systems)
Issued under the International Convention on the Control of Harmful Anti-Fouling Systems on Ships
under the authority of the Government of the Netherlands by Lloyd's Register EMEA.

When a Certificate has been previously issued this Certificate replaces the certificate dated **20 August 2019**.

Particulars of ship	
Name of ship	**SOSPAN DAU**
Port of registry	**PAPENDRECHT**
Distinctive numbers or letters	**PBAL**
Gross tonnage	**1,546**
IMO number	**7711062**

An anti-fouling system controlled under Annex 1 has not been applied during or after construction of this ship. ☐

An anti-fouling system controlled under Annex 1 has been applied on this ship previously, but has been removed by on . ☐

An anti-fouling system controlled under Annex 1 has been applied on this ship previously, but has been covered with a sealer coat applied by **Kooiman Shipyard Zwijndrecht, The Netherlands** on **01 May 2001**. ☒

An anti-fouling system controlled under Annex 1 was applied on this ship prior to but must be removed or covered with a sealer coat prior to . ☐

This is to certify that

1 the ship has been surveyed in accordance with regulation 1 of Annex 4 to the Convention; and

2 the survey shows that the anti-fouling system on the ship complies with the applicable requirements of Annex 1 to the Convention

Issued at **Rotterdam** on **07 July 2021**

Date of completion of the survey on which this certificate is issued **25 June 2021**

This document is signed electronically in accordance with IMO FAL.5/Circ.39/Rev.2 and takes precedence over any printed version.

Walter Machielsen
Surveyor to Lloyd's Register EMEA

a member of the Lloyd's Register group.