PILBARA PORTS AUTHORITY

VESSEL BIOFOULING RISK ASSESSMENT AND MANAGEMENT PROCEDURE PORT OF ASHBURTON

A851086

VESSEL BIOFOULING RISK ASSESSMENT AND MANAGEMENT PROCEDURE PORT OF ASHBURTON

PILBARA PORTS AUTHORITY

TABLE OF CONTENTS

FIGURES

TABLES

1. INTRODUCTION

1.1 Introduced Marine Pests

Marine species may be introduced inadvertently or intentionally to regions outside their native range. While many non-native species remain inconspicuous and innocuous, some can drastically alter marine environments, becoming the dominant flora and fauna of an area to the detriment of native species. Species displaying these deleterious attributes are often referred to as introduced marine pests (**IMP**).

IMP often threaten the amenity, social and cultural values of the marine community. IMP can also damage important fisheries and significantly increase labor costs associated with preventing or removing biofouling from marine facilities and equipment.

IMP may be introduced to and translocated within Australian waters through a variety of activities, including:

- Biofouling on hulls and inside internal seawater pipes of (international and domestic) commercial and recreational vessels;
- Ballast water discharged by (international and domestic) vessels;
- Aquaculture operations;
- Aquarium imports; and
- Marine debris and ocean currents.

Ports and harbours are the entry point for vessels and these sheltered and modified environments can offer an ideal system for the establishment of IMP.

1.2 Biofouling

Biofouling is considered an important vector for bio-invasions and is described as the accumulation of microorganisms, plants, algae, and animals on submerged structures (especially ships' hulls). All vessels have some degree of biofouling, even those which may have been recently cleaned or had a new application of an anti-fouling system. The biofouling process begins within the first few hours of a vessel's immersion in water. The biofouling that may be found on a vessel is influenced by a range of factors, such as:

- design and construction, particularly the number, location and design of niche areas (e.g. sea chests, bow thrusters, hull appendages and protrusions, etc.);
- specific operating profiles, including parameters such as operating speeds, ratio of time underway compared with time alongside, moored or at anchor, and where the vessel is located when not in use (e.g. open anchorage or estuarine port);
- places visited and trading routes (e.g. depending on water temperature and salinity, abundance of fouling organisms, etc.); and

- maintenance history, including the type, age and condition of any anti-fouling coating, installation and operation of anti-fouling systems, maintenance of sea chests and overboard strainers, and dry-docking/slipping and hull cleaning practices.

Biofouling on vessels entering the marine waters of the Port of Ashburton (**the Port**) may result in the establishment of IMP which may pose threats to human, animal and plant life, economic and cultural activities, and the marine environment.

However, implementing practices to control and manage vessel biofouling can greatly assist in reducing the risk of the transfer of IMP to the Port. It is also more cost-effective, and has a greater chance of success, than attempting eradication after a marine pest has established in the local environment.

1.3 Ministerial Statement 1131

Pilbara Ports Authority (**PPA**) is the Proponent for Ministerial Statement 1131 (**MS 1131**), which relates to the Public Berths (**MOF**), associated Shipping Channel and Access Road at the Port. As Proponent for MS1131, PPA is responsible for implementing a suite of statutory conditions relating to the management of IMP for *non-trading*[1] commercial vessels at the Port.

Condition 6-1 of MS1131 requires that PPA manage non-trading commercial vessel activities at the Port of Ashburton, with the objective of preventing the introduction of IMP into Western Australian State Waters (**State Waters**). Condition 6-2 mandates that prior to the departure of any non-trading commercial vessels from any Port into State waters, the following must occur:

- A risk assessment must be undertaken in accordance with a procedure approved by the Department of Primary Industries and Regional Development (**DPIRD**); and

- The risk assessment must be submitted to DPIRD for determination of the risk level assigned to the vessel.

In accordance with the requirements of Condition 6-2, this *Vessel Biofouling Risk Assessment and Management Procedure* (**VBRAMP**) will be reviewed and approved by DPIRD. It is mandatory for all non-trading commercial vessels visiting the Port to implement this procedure. To meet the intent of Condition 6-1 and 6-2 of MS1131, PPA has developed this VBRAMP. The risk assessment methodology that forms the basis of the VBRAMP is housed within the Vessel Check Portal – an online integrated biofouling risk assessment and management tool managed by DPIRD.

[1] Consistent with MS1131, the term 'Non-trading vessel' is defined as: "those vessels included in the definition of non-trading vessels outlined in the *National System for the Prevention and Management of Marine Pest Incursions, National Biofouling Management Guidance for Non-Trading Vessels*".

2. OBJECTIVE

PPA has developed this VBRAMP to ensure that all non-trading commercial vessels visiting the Port implement appropriate vessel biofouling management, thereby mitigating the transfer of IMP to the Port to *as low as reasonably practicable* (**ALARP**). The Procedure has been prepared by PPA to meet the overarching objective of Condition 6-1 of MS 1131 and has been approved by DPIRD in accordance with Condition 6-2 of MS1131.

3. SCOPE

The procedure must be implemented by the Vessel Company (or authorised representative) responsible for any non-trading commercial vessel that:

- seeks to enter the Port of Ashburton waters from any port (or other location) within State waters, interstate or international waters (i.e. prior to entry); or
- currently operates within the Port but intends to transfer (demobilise) to another location within State waters.

Examples of common non-trading commercial vessels that may seek to operate within the Port are displayed in Table 1. However, several important exemptions currently apply to certain vessels types, as follows:

- Trailered vessels (refer to Section 4.4.1)
- Dredge vessels (refer to Section 4.4.2)
- Domestic Commercial Vessels (**DCV**) and Registered Australian Vessels (**RAV**) without an IMO Number (refer to Section 4.4.3)
- Domestic Commercial Vessels and Registered Australian Vessels that operate solely within and/or between specified port locations in the Pilbara region (Section 4.4.4)

Refer to the relevant section within the VBRAMP for further information on how these exemptions may apply.

PPA recognises that the scope of the VBRAMP includes (in part) the associated "immersible equipment activities" as required by Condition 6-1. The *National Biofouling Management Guidelines for Non-Trading Vessels* describes immersible equipment / gear as including mooring system components that are used as part of normal operations (e.g. anchor chain locker and associated chain).

Other immersible equipment associated with the operation of non-trading commercial vessels are not in scope and will be required to be risk assessed on a case-by-case basis in conjunction with DPIRD. This requirement is mandated in PPA's Port Handbook for the Port of Ashburton.

Table 1: Common types of non-trading commercial vessels that may operate in the Port of Ashburton

REGULATED AUSTRALIAN VESSELS & FOREIGN FLAG VESSELS	DOMESTIC COMMERCIAL VESSELS
• Barges • Cable vessels • Dredge vessels • Heavy lift vessels • Research vessels • Diving support vessels • Mobile offshore drilling units (semi-submersible rigs; jack-up rigs) • Rock-dumping vessels • Floating accommodation vessels • Tugs (e.g. Svitzer Tugs)	• Crew transfer vessels; • Pilot transfer vessels; • Tugs

4. VESSEL BIOFOULING RISK ASSESSMENT AND MANAGEMENT

The Vessel Company (or authorised representative) responsible for a non-trading commercial vessel seeking to enter or depart from the Port, must undertake the following steps:

- Register vessel with the Vessel-Check Portal (Section 4.1);
- Complete a Vessel-Check Risk Assessment via the Portal (Section 4.1);
- Generate Vessel-Check Risk Assessment report from the Portal within 14 calendar days of:
  a) the vessel's departure from any port[2] within State Waters or other location within interstate or international waters, to the Port of Ashburton; OR
  b) the vessel's departure from the Port of Ashburton to another location within State Waters (i.e. demobilisation);

  which demonstrates that the indicative risk of the vessel is Low or Moderate. A non-trading commercial vessel that has an indicative risk score of High will not be permitted to enter the Port.
- Submit this report via email to PPA via the following address: environment.westpilbara@pilbaraports.com.au.

Note: Risk report is generated in Vessel-Check Transit Management element by selecting *1) Actions*; *2) Risks*; and then scroll down and select *Risk Report; Detailed PDF report*.

[2] Exemptions currently apply to non-trading Domestic Commercial Vessels and Regulated Australian Vessels that operate primarily within and between certain port / platform locations within the Pilbara region. Refer to Section 4.4 for more detail.

Table 2 provides an overview of each possible Risk Rating outcome from the Vessel-Check Portal, along with (indicative) biofouling management action(s) that will be required by DPIRD (under the requirements of this procedure).

IMPORTANT REMINDER: Confirm whether exemptions currently apply to your non trading commercial vessel (refer to Section 4.4).

Table 2: Vessel-Check Portal Risk Assessment and (Indicative) Management Outcomes for Non-Trading Commercial Vessels, Port of Ashburton

VESSEL-CHECK (INDICATIVE) RISK RATING	VESSEL-CHECK ASSESSMENT OUTCOME	INDICATIVE BIOFOULING MANAGEMENT ACTION(S) REQUIRED BY DPIRD
High	**Risk *is not* acceptable to PPA:** Vessel Company (or authorised representative) will be notified that the vessel *will not* be permitted to enter Port waters. This decision is consistent with the intent of Ministerial 1131 and is made on the basis that: • the biofouling management practices implemented for the vessel are not sufficient to mitigate the transfer of IMP to the Port; • the vessel therefore poses an unacceptable risk to PPA. The Vessel Company (or authorised representative) must implement appropriate biofouling management and/or mitigation actions (to the satisfaction of DPIRD Aquatic Pest Biosecurity) in order to lower its risk.	*DPIRD will require additional biofouling management or mitigation actions to address risk.* The Portal identifies that the Vessel Company (or authorised representative) can lower the IMP risk posed by its vessel, by implementing additional biofouling management and/or mitigation actions to significantly reduce the risk, for example: • Provision of missing documentation e.g. biofouling management plan, record book or antifouling certificate. • Provision of additional information on management practices implemented relating to biofouling management and mitigation of IMP risk. • Undergo an inspection by a recognised inspector for IMP • Cleaning/dry-docking of vessel
Medium	**Risk is acceptable to PPA:** Vessel Company (or authorised representative) will be notified that the vessel will be permitted to enter the Port on this occasion. However, the Vessel Company (or authorised representative) must demonstrate that the risk of the vessel is Low *prior to the next visit to the Port.*	*Additional biofouling management or mitigation actions may be required to address risk*. Vessel-Check assessment identifies that the Vessel Company (or authorised representative) can lower its risk further by implementing additional biofouling management and/or mitigation actions. These actions will be determined through the Vessel-Check Portal in conjunction with DPIRD Aquatic Pest Biosecurity Unit and the Vessel Company (or authorised representative).
Low	**Risk is acceptable to PPA:** Vessel Company (or authorised representative) will be notified that the vessel will be permitted to enter the Port.	Biofouling management practices implemented for the vessel are best practice and sufficient to mitigate the transfer of IMP to the Port of Ashburton to as low as reasonably practicable (ALARP). No additional biofouling management and/or mitigation actions are required.

4.1 Vessel-Check Portal – Overview, Registration and Risk Assessment

The Vessel-Check Portal provides an indicative vessel biosecurity risk assessment to determine whether the biofouling management practices employed by a vessel are sufficient for mitigating the transfer of IMP to the Port to ALARP (it does NOT assess whether a vessel has an IMP on it). The Portal follows the 'best practice' guidance set out by the International Maritime Organisation's (IMO) guidelines for the management of ships biofouling (resolution MEPC.207(62)).

Based on the biofouling management practices recorded by a Vessel Company (or authorised representative), the indicative risk of transferring an IMP is assessed in the Portal, by considering the following information:

- Vessel biofouling management plan and record book presence;
- Inherent risk of the vessel type;
- Outlined vessel biofouling niche management;
- Antifoulant coating presence/age;
- Hull husbandry (dry-dock, in-water cleaning, in-water IMS inspection) history;
- Port duration (compares previous duration to average port duration);
- Environmental compatibility between last port of call and the destination port;
- Internal & external niche management implementation;
- Lay-up periods / inactivity; and
- Operating profile of typical vessel speed and period vessel is berthed compared to period at sea.

The Portal generates an indicative risk of High, Medium or Low for the vessel, which is an average of all the metrics considered within the Portal.

Table 3 provides an overview of steps that must be completed by a Vessel Company (or authorised representative) to register a non-trading commercial vessel with the Portal and complete a Vessel-Check Risk Assessment.

Table 3: Step-by-step overview of registering with the Vessel-Check Portal and completing a Vessel-Risk Assessment

Step 1:	Vessel Company (or an authorised representative) registers on the Portal and sets up appropriate users for the company (i.e. vessel operations/managers/officers, vessel masters, vessel agents etc). Go to: https://www.vessel-check.com.
Step 2:	Appropriate person (i.e. vessel technical manager, vessel agent or vessel master/officer) creates a profile for each vessel by supplying each vessel(s): • Management planning and vessel specific niche areas; and • Supporting documentation (e.g. Biofouling Management Plan and Record Book, Antifoulant Coating Certificate).
Step 3:	Appropriate person updates the Portal Biofouling Record Book when management actions are implemented in accordance with the Biofouling Management Plan
Step 4:	The Portal (based on supplied information in the vessel's profile) calculates an indicative risk (High, Medium or Low) associated with the vessel, when the vessel designates in its onboard transponding automatic identification system or manually through the Portal that it intends to: • depart from any other port within State waters or interstate or international waters to the Port of Ashburton; AND • depart from the Port of Ashburton to another location within State waters (i.e. demobilisation). Appropriate person shall manually update the Portal Operating Profile element when for vessel lay up periods. Important Note: The indicative risk score (*High, Medium* or *Low* – refer to Table 2) provided by Vessel-Check is an average of all the metrics considered within the Vessel-Check Portal

4.2 Exemptions

4.2.1 Trailered Vessels

Non-trading vessels as defined under the *National Biofouling Management Guidelines for Non-Trading Vessels* (DAWR 2009) include trailered vessels. DPIRD recognises that trailered vessels that operate within the Port are likely to have a negligible risk of introducing marine pests as:

- It is likely that they will only be operating in a local area, hence any biofouling accumulated during its deployment is likely to be from the local environment, and
- It is unlikely they are going to be transiting from one region to another via sea given it is cheaper to remove the vessel and truck between deployment areas.

As such, trailered vessels that are washed (with fresh water) out of water and given adequate time to dry prior to entering or departing the Port will be exempt from this procedure.

4.2.2 Dredge Vessels

Dredge vessels operating within the Port may need to frequently transit between the Shipping Channel and spoil grounds within the adjacent Port of Onslow to dispose of spoil material. Such vessels are exempt from submitting further Vessel Risk Assessments when transiting between the Port and the adjacent Port of Onslow for this purpose.

4.2.3 Non-Trading Commercial Vessels Without an IMO Number

The Vessel-Check Portal is currently unable to capture non-trading commercial vessels that do not have an IMO number. This includes Domestic Commercial Vessels (DCV) using the Australian Maritime Safety Authority Unique Vessel Identifier (UVI). Such vessels are therefore exempt from this procedure.

4.2.4 Non-Trading Commercial DCV and RAV Operating Within and Between Specified Port Locations in the Pilbara

PPA recognises that there are many instances of non-trading DCV and Registered Australian Vessels (RAV) that regularly service or frequently visit the Port of Ashburton (in some cases daily) but are based at / operate from other Ports in the Pilbara region (refer to Figure 1). Examples of these include (but are not limited to):

- Crew transfer vessels – include a range of vessels that are moored in the Port of Onslow (at Beadon Creek) and the Port of Dampier, and service the Port's requirements from these locations;
- Pilot transfer vessels – include several vessels that are moored in the Port of Onslow and the Port of Dampier and service the Port from these locations;
- Tug vessels (PPA facility) - PPA's Ashburton Public Berths (MOF) are serviced by a fleet of tugs that are based at the Port of Dampier.

PPA also recognises that the fleet of tugs moored in pens at adjacent to PPA's Ashburton Public Berths (MOF) are also required to (*ad hoc*) provide towage service to Chevron's LNG facility at the Port of Barrow Island and Wheatstone Platforms and undertake non-routine towage / other operations at other port locations within the Pilbara region.

Where the operations of a non-trading DCV or RAV is to remain *solely within and between the port locations shown in Figure 1*, the Vessel Company (or authorised representative) is required to complete the following:

- Register vessel with the Vessel-Check Portal;
- Complete a Vessel-Check Risk Assessment via the Portal; and

- Generate Vessel-Check Risk Assessment report from the Portal within 14 calendar days of the vessel's first entry to the Port[3].

Which demonstrates that the indicative risk of the vessel is **Low**. A non-trading DCV or RAV that has an indicative risk score of **High** or **Moderate** will not be permitted to enter or operate within the Port.

Submit this Report to PPA via email to environment.westpilbara@pilbaraports.com.au

The Vessel Company (or authorised representative) shall be exempt from submitting further Vessel Risk Assessments to PPA until:

- The vessel departs directly from the Port to a location that is within State waters but is outside the Pilbara port locations shown in Figure 1 – *a new Vessel Risk Assessment is required prior to re-entry to the Port*; OR
- The vessel operates outside the port locations shown in Figure 1 – *a new Vessel Risk Assessment is required prior to re-entry to the Port*.

[3] Note that certain vessels (e.g. tugs and pilot vessels) fall within this category of exemptions, and therefore may already be operating within the Port. As such, the 14-day timeframe will not be applicable. This information must be presented to PPA as soon as practicable.

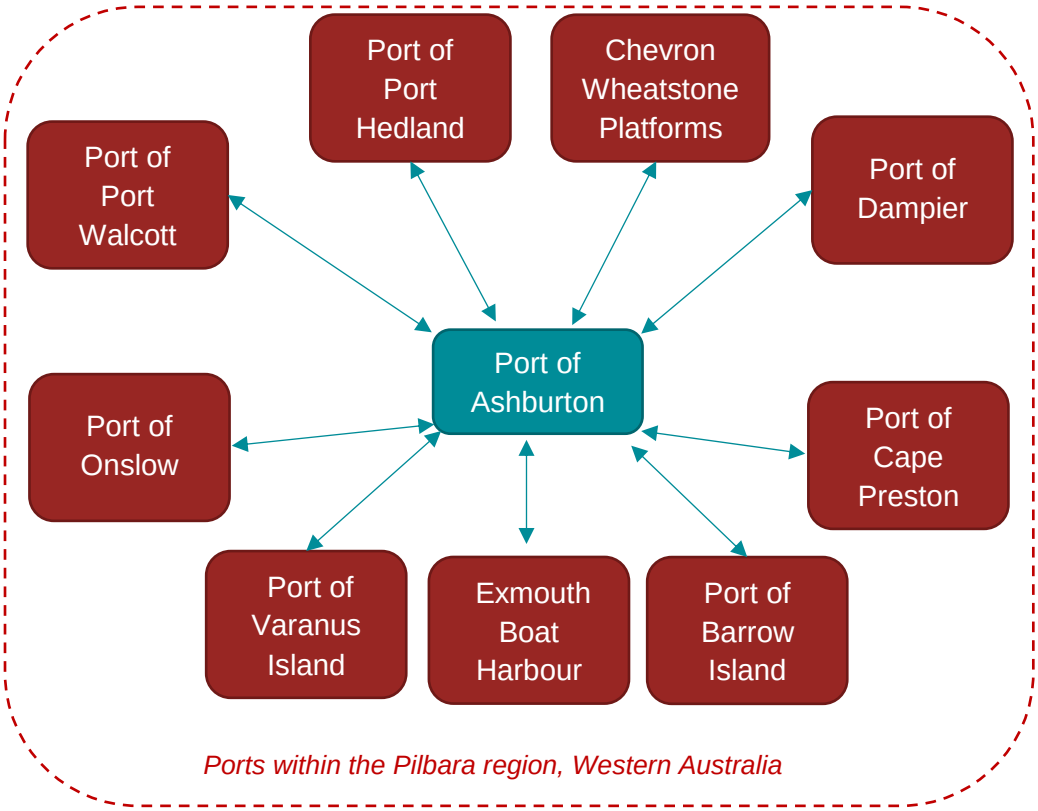

Figure 1: Non-trading Domestic Commercial Vessels and Registered Australian Vessels service the Port of Ashburton from a range of Port locations across the Pilbara region.

5. RECORDS

PPA's Environment and Heritage team (West Pilbara) will retain a record (in Objective) of all Vessel Risk Assessments submitted to PPA (via email), as well as the outcomes of PPA's review / assessment of these applications.

6. PROCESS OWNER

The Environment and Heritage Manager (West Pilbara) is responsible for this procedure.

Date approved:	20 October 2023	Review date:	20 October 2025
Version:	1	Approved by:	Environment and Heritage Manager (West Pilbara)