GUIDANCE ON NEW ZEALAND BIOFOULING REGULATIONS

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Guidance on New Zealand biofouling regulations

New Zealand has recently adopted national requirements on biofouling in order to avoid ships introducing new invasive species into its marine ecosystem.

This guidance introduces the New Zealand biofouling requirements, the enforcement procedure and suggests best practice procedures for ships. It is aimed at shipowners, and masters sailing to New Zealand.

New Zealand's biofouling requirements are outlined in The Craft Risk Management Standard (CRMS-BIOFOUL). The requirements and the associated guidelines can be found at:
https://www.biosecurity.govt.nz/importing/border-clearance/vessels/arrival-process-steps/biofouling/biofouling-management/

New Zealand bio-fouling requirements

The requirements are based on the IMO guidance – *Resolution MEPC.207(62)-2011 Guidelines for the Control and Management of Ships' Biofouling to Minimize the Transfer of Invasive Aquatic Species*, which makes compliance easy for ships that already manage biofouling.

Ships arriving at New Zealand are categorised into two groups and in order to determine which category a ship belongs, there are the following two questions:

1. Are all of your intended New Zealand port calls listed under "**Places of first arrival**" (PoFA)?
2. Is the total intended stay in New Zealand 20 days or less?

If the answers to **both** the questions are "yes", then the ship will have to comply with the requirements of short stay ships. If one or both of the answers is a "no", the ship will have to comply with the stricter requirements for long stay ships. The following flow diagram shows more details. For a list of ports listed under "Places of first arrival(PoFA)", please visit:
https://www.biosecurity.govt.nz/news-and-resources/resources/registers-and-lists/places-of-first-arrival-seaports/

New Zealand wants all international ships to arrive with a "clean hull". New Zealand has recognized this is not feasible for most ships, and so has identified acceptable thresholds that apply to the different categories of ships. More detailed information on the thresholds can be found in appendix 2 of CRMS-BIOFOUL. From New Zealand's perspective, when a short stay ship meets the biofouling threshold as shown in table 2 of the following flowchart, it complies with the requirements.

Is your ship a short stay ship or a long stay ship?

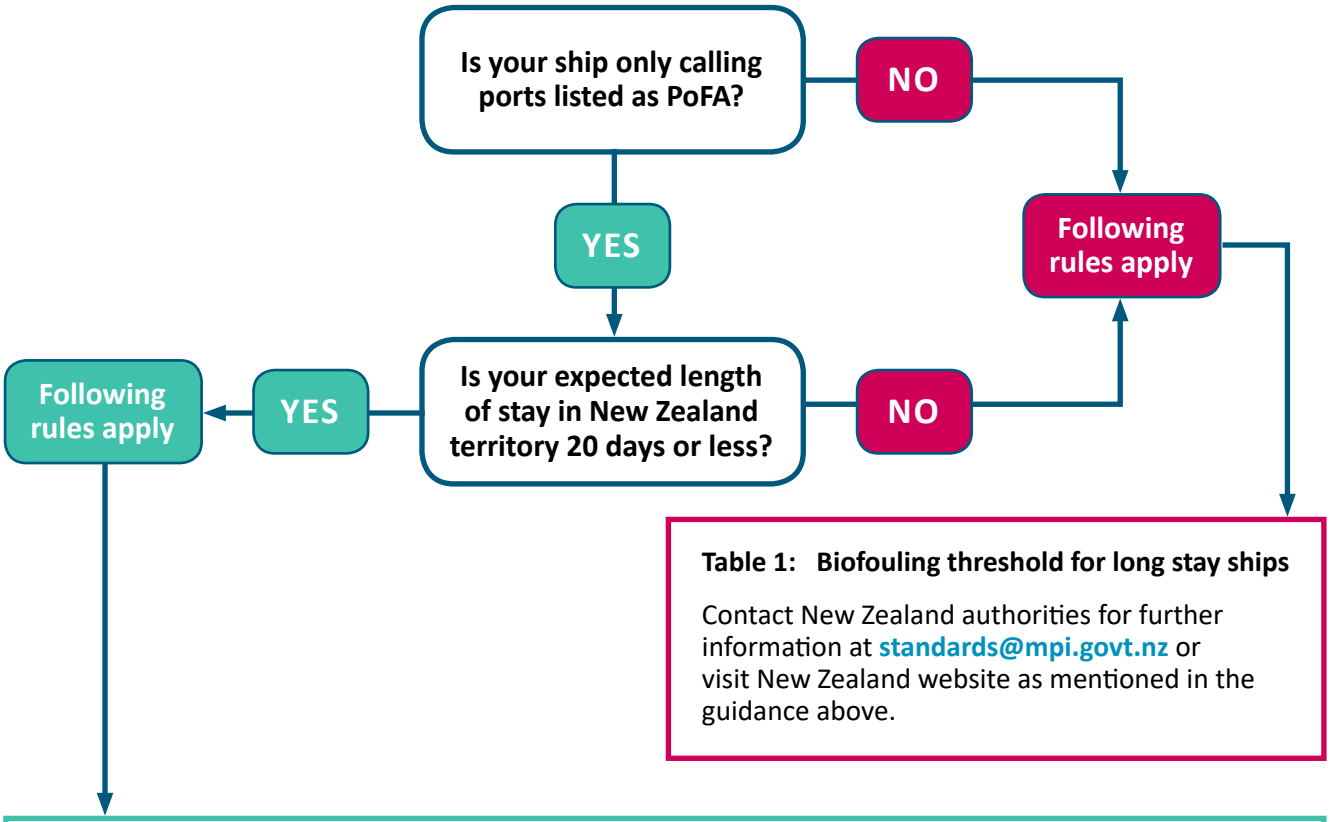


Table 1: Biofouling threshold for long stay ships

Contact New Zealand authorities for further information at **standards@mpi.govt.nz** or visit New Zealand website as mentioned in the guidance above.

Table 2: Biofouling threshold for short stay ships

Hull part	Allowable biofouling
All hull surfaces	**Slime layer**; **Goose barnacles**.
Wind and water line	Green algae growth of unrestricted cover and no more than 50 mm in frond, filament or beard length; Brown and red algal growth of no more than 4 mm in length; Incidental (maximum of 1%) coverage of one organism type of either tubeworms, bryozoans or barnacles, occurring as: • isolated individuals or small clusters; and • single species, or what appears to be the same species.
Hull area	Algal growth occurring as: • no more than 4 mm in length; and • continuous strips and/or patches of no more than 50 mm in width. Incidental (maximum of 1%) coverage of one organism type of either tubeworms, bryozoans or barnacles, occurring as: • isolated individuals or small clusters that have no algal overgrowth; and • a single species, or what appears to be the same species.
Niche areas **Sea chest** **Propeller, Rudder, Stabiliser, Bulbous bow, Draft marks** **Bow-thrusters, Bilge Keels, Discharge pipes**	Algal growth occurring as: • no more than 4 mm in length; and • continuous strips and/or patches of no more than 50 mm in width. Scattered (maximum of 5%) coverage of one organism type of either tubeworms, bryozoans or barnacles, occurring as: • widely spaced individuals and/or infrequent, patchy clusters that have no algal over-growth; and • a single species, or what appears to be the same species; and Incidental (maximum of 1%) coverage of a second organism type of either tubeworms, bryozoans or barnacles, occurring as: • isolated individuals or small clusters that have no algal overgrowth; and • a single species, or what appears to be the same species.

Data Source: Craft Risk Management Standard (CRMS), Appendix 2 **https://www.biosecurity.govt.nz/dmsdocument/11668/loggedIn**

Arrive with a clean hull

There are three ways to comply with the requirements and arrive with a clean hull:

1. Doing continual hull maintenance using best practices as mentioned in the IMO guidelines – *Resolution MEPC.207(62)-2011 Guidelines for the Control and Management of Ships' Biofouling to Minimize the Transfer of Invasive Aquatic Species*. This entails having a proper anti fouling coating (AFC), conducting regular inspections and cleaning, maintaining a biofouling management plan (BFMP) and a properly updated biofouling record book.

2. Cleaning the ship's hull and niche areas within 30 days prior to arrival in New Zealand territory. The cleaning should be done in such a way that it meets the threshold values. See also appendix 2 of CRMS-BIOFOUL.

3. Having the ship's hull cleaned in New Zealand within 24 hours of arrival by an approved service provider (presently, this involves dry docking or hauling the ship out of water and is only available for ships less than 120 metres in length). Proof of booking must be provided to authorities on arrival.

If the ship cannot meet the requirements using one of the above-mentioned measures, then New Zealand also gives the option of developing a Craft Risk Management Plan for a fee. A Craft Risk Management Plan outlines alternate biofouling management actions that will be undertaken in order to manage biofouling to the appropriate level.

Option 1 is the recommended option for short stay commercial ships and is in line with the IMO guidelines.

Option 2 is also a viable option, especially if the ship is in a port where cleaning facilities are readily available. This can be followed by ships which do not frequently visit New Zealand, or for ships that are coming to work in New Zealand for a long time, or permanently.

Option 3 involves hauling the ship (less than 120 metres in length) out of water or dry-docking in New Zealand using the available facilities in New Zealand. This is a costly measure for owners and will delay the ship.

Best practice for ships engaged in international voyages

Ships should have a biofouling management plan, which outlines the continual, best practice maintenance of the hull and niche areas, and an up-to-date biofouling record book. The record book must demonstrate that the biofouling management plan has been followed. More information on these can be found in the IMO's Guidelines under resolution MEPC 207(62). Further guidance is provided by New Zealand at **https://www.mpi.govt.nz/dmsdocument/11671/loggedIn**. Information on biofouling management plan(BFMP) guidance can be found at https://www.mpi.govt.nz/dmsdocument/27855-guidance-for-vessel-owners-developing-a-biofouling-management-plan.

As a starting point, New Zealand requires the hull of all ships in option one to be coated with a suitable AFC that matches with the operating profile of the ship. It is also important to ensure that this AFC remains within the coating's expected operating life.

Secondly, if the ship has been stationary for more than 30 days since the last application of anti-fouling coating, New Zealand expects the ship to have the hull and niche areas inspected for biofouling growth. If the inspection reveals that the biofouling accumulation is more than the

threshold mentioned in the flow chart above, then appropriate biofouling management has to be carried out.

Thirdly, regular inspection and cleaning is required as soon as the AFC crosses its half-life period. When this happens, the hull and niche areas should be inspected for biofouling and if needed (based on the threshold values), cleaning should be carried out. At times, frequent cleaning and wrong cleaning techniques may result in damage to the hull coating. It is advisable to consult the paint manufacturer(s) and follow their advice. Evidence of this cleaning in the form of cleaning reports, photos and/or videos should be retained and presented to authorities when so requested.

New Zealand further requires that when performing underwater hull cleaning, importance should be given to niche areas such as rudder hinge, propeller, sea chest, bilge keel, bow thruster etc.

Enforcement and control

The process begins as soon as New Zealand is notified that a ship is heading for its waters.

1. A number of biofouling questions are listed in the **Advance Notice of Arrival forms** and Biofouling and Ballast Water Declaration forms (**part 1 & 2**, **part 3 (1)**, **part 3 (2)**). Ships are also required to provide a detailed voyage memo listing all port calls during the past 12 months. All the arrival information, which a ship has to submit, can be found at the following link: **https://www.biosecurity.govt.nz/importing/border-clearance/vessels/arrival-process-steps/**.

2. The information needed includes details of AFC, the port of arrival and the length of intended stay in that port, operational history including any extensive idle/stationary times, details of biofouling management plan, biofouling record book including evidences of inspection, cleaning etc.

   Based on the information received from ships, New Zealand rates the ship according to certain risk indicators and decides which ships to audit for compliance with the standard.

   New Zealand uses the following factors to choose ships for audits:

   - presence or absence of effective AFC
   - status of AFC (age, suitability, surface type)
   - stationary periods or periods of low speed
   - proactive biofouling management
   - ship type, operating speed etc.

   Please note, that a ship with high risk indicators does not necessarily mean a non-compliant ship, and/or a low-risk ship does always get an automatic free entry. A ship with high risk indicators can be allowed to operate without any problems, if it can demonstrate a good biofouling management approach. At the same time, a ship with low risk indicators without proper documentation may be subject to additional audits/inspections. For example, a ship with low risk indicators without proper documentation will be subject to additional inspection(s) such as physical inspection(s) of underwater area. Further action will depend on the outcome of such inspection(s).

3. If a ship is chosen for audit, New Zealand will advise the owner, operator or agent and ask for evidence that the ship has conducted one of the measures to comply with the requirements. Having more of the risk indicators listed above, means the ship is more likely to be chosen for audit. However, if it carries the correct evidence showing biofouling has been managed, it

should comply with the requirements.

Acceptable forms of evidence include:

- antifouling certificates, including information on AFC application date, type of antifouling applied and if it is applied to niche areas
- reports from a recent hull and niche area inspection, with photos and/or video footage
- reports from the most recent cleaning of the hull and niche areas, with photos and/or video footage
- records of contingency planning if a ship falls out of its operational profile
- biofouling management plan and record book.

4. If the AFC has expired, this is not considered best practice. Operators should contact New Zealand and advise them about their plans to manage biofouling. They may develop a Craft Risk Management Plan with guidance from New Zealand but at a cost. They can contact **standards@mpi.govt.nz** to discuss this.

5. Prior to arrival at the PoFA, New Zealand will check the documentation submitted by the ship and communicate what verification is required according to the ship's risk profile. Verification ranges from confirmation of the information or checking records to a physical inspection of the ship's hull.

Consequences of non-compliance

If a ship is unable to provide verifiable evidence or if there is suspicion of non-compliant biofouling from the documents submitted, then New Zealand may:

- inspect the ship upon arrival
- restrict entry into New Zealand
- restrict the ship's New Zealand itinerary such as cancelling some ports of call or reducing the length of port stay
- If an inspection reveals that the ship's hull is not clean ie that biofouling on the hull is in breach of the thresholds (see figure above), then ship may be directed to manage the biofouling risk (dry-dock or haul out) within 24 hours by an approved service provider in New Zealand or leave New Zealand territory within a specified period of time.

Presently the facilities available in New Zealand for hauling out or dry-docking is only available for ships less than 120 metres in length.

All the costs associated with inspections and biofouling management will be borne by the ship.

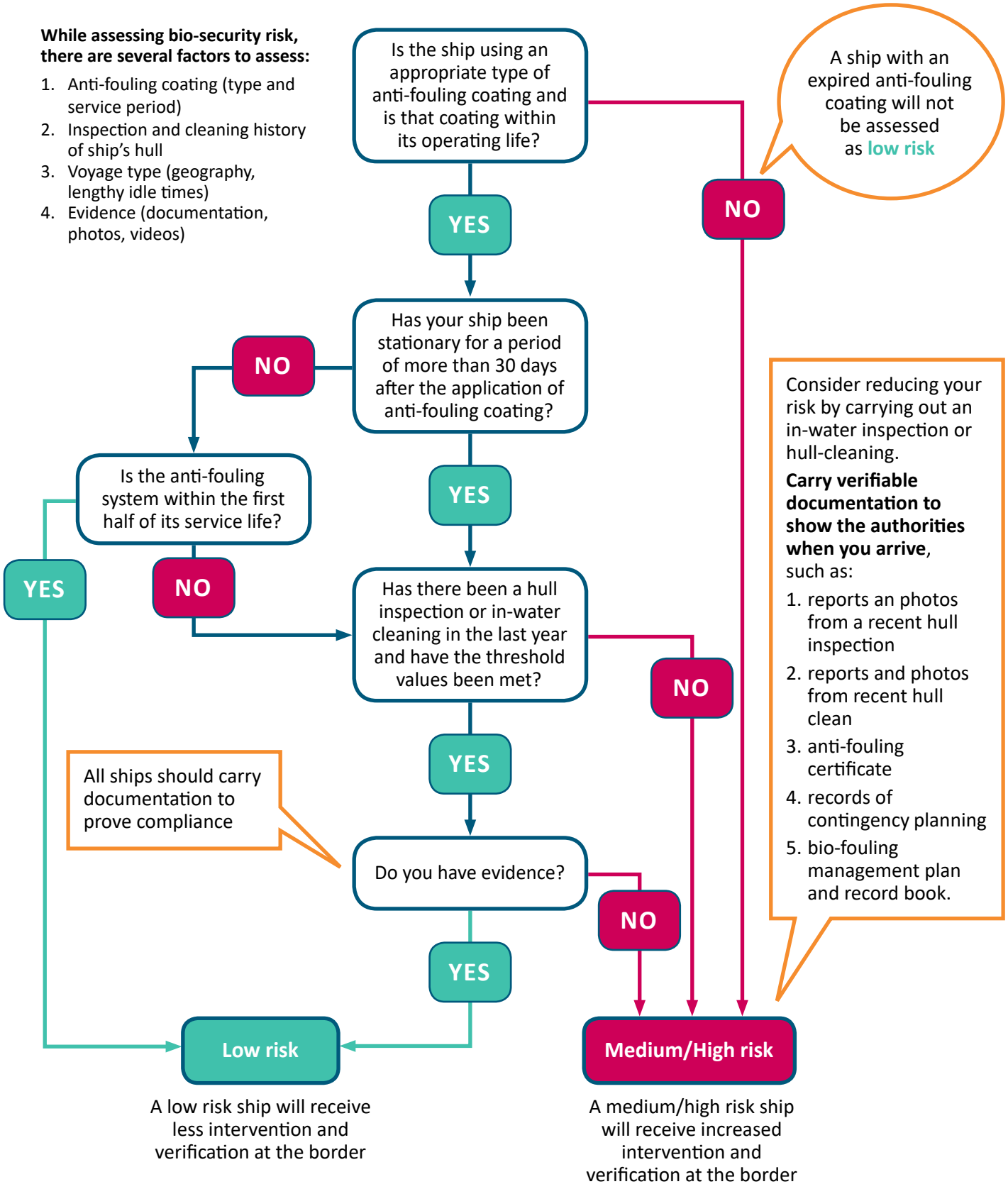
Should you have any questions or require further information, please contact **martech@bimco.org**
See the flowchart below, made by BIMCO for easy guidance. There is also an **official flowchart** available at NZ MPI website, which enables a ship to self-assess its risk profile.

Guidelines for assessing the bio-security risk of ships arriving at New Zealand

(This information is for guidance only and is developed to help ships assess their own risk easily)

While assessing bio-security risk, there are several factors to assess:

1. Anti-fouling coating (type and service period)
2. Inspection and cleaning history of ship's hull
3. Voyage type (geography, lengthy idle times)
4. Evidence (documentation, photos, videos)



A low risk ship will receive less intervention and verification at the border

A medium/high risk ship will receive increased intervention and verification at the border

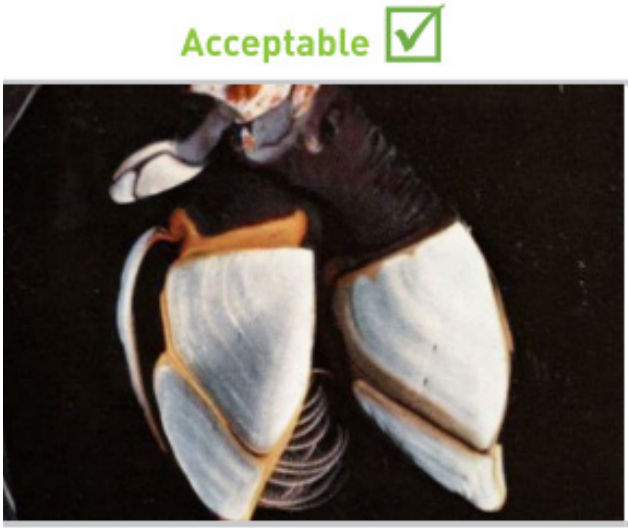
Data Source: **https://www.biosecurity.govt.nz/dmsdocument/27915/loggedIn**

Acceptable and unacceptable thresholds limits

Slime layer

Data Source: **https://www.biosecurity.govt.nz/dmsdocument/27852/loggedIn**

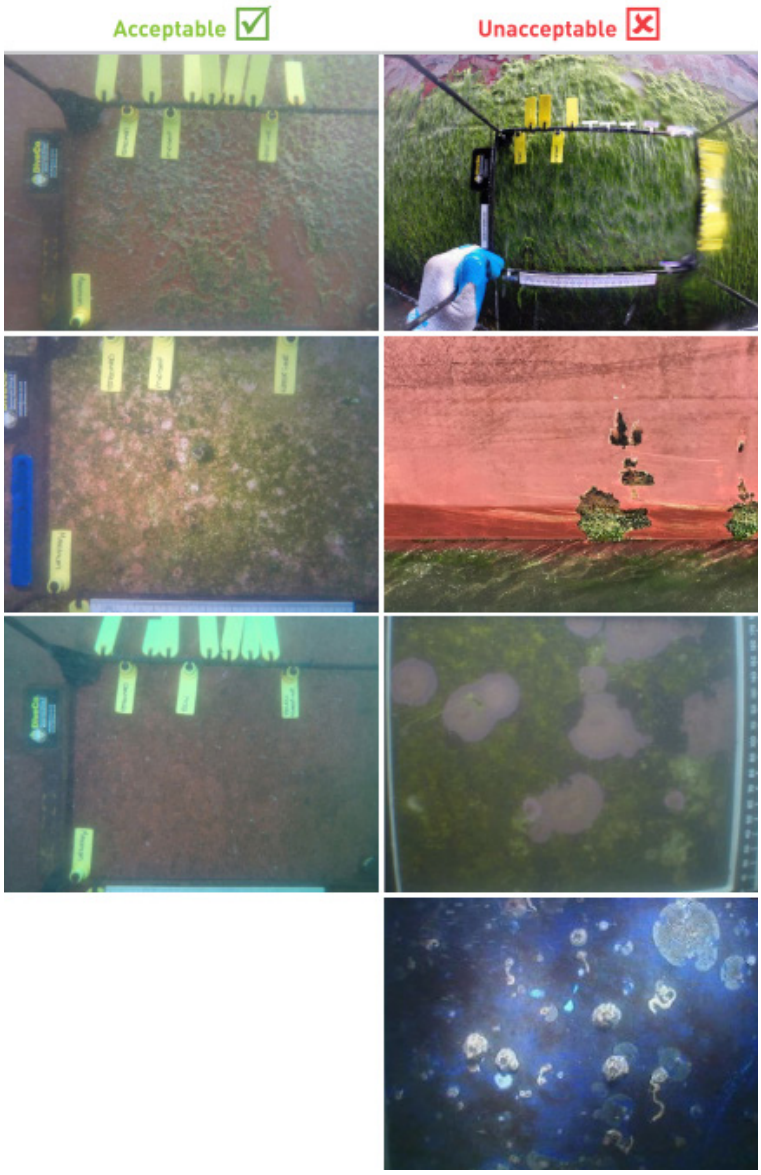
Gooseneck barnacles



Gooseneck barnacles are always allowed under the CRMS, in any amount, in any location

Data Source: **https://www.biosecurity.govt.nz/dmsdocument/27852/loggedIn**

Water line and flat hull surfaces



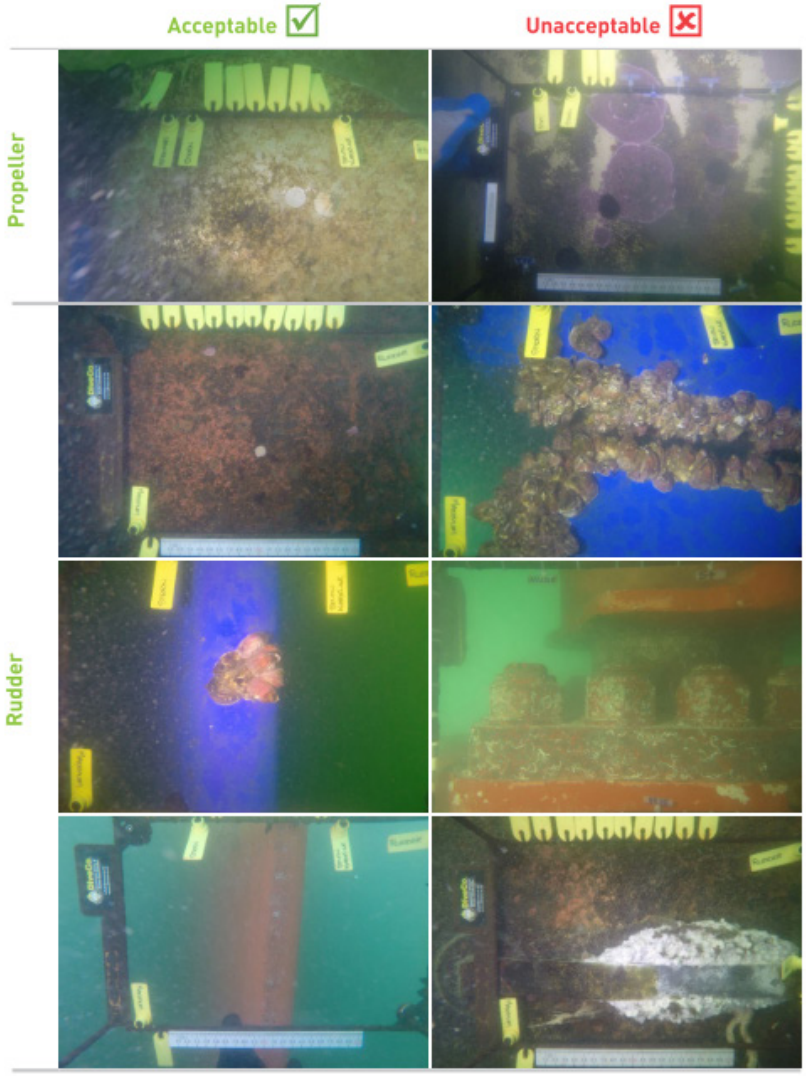
Data Source: **https://www.biosecurity.govt.nz/dmsdocument/27852/loggedIn**

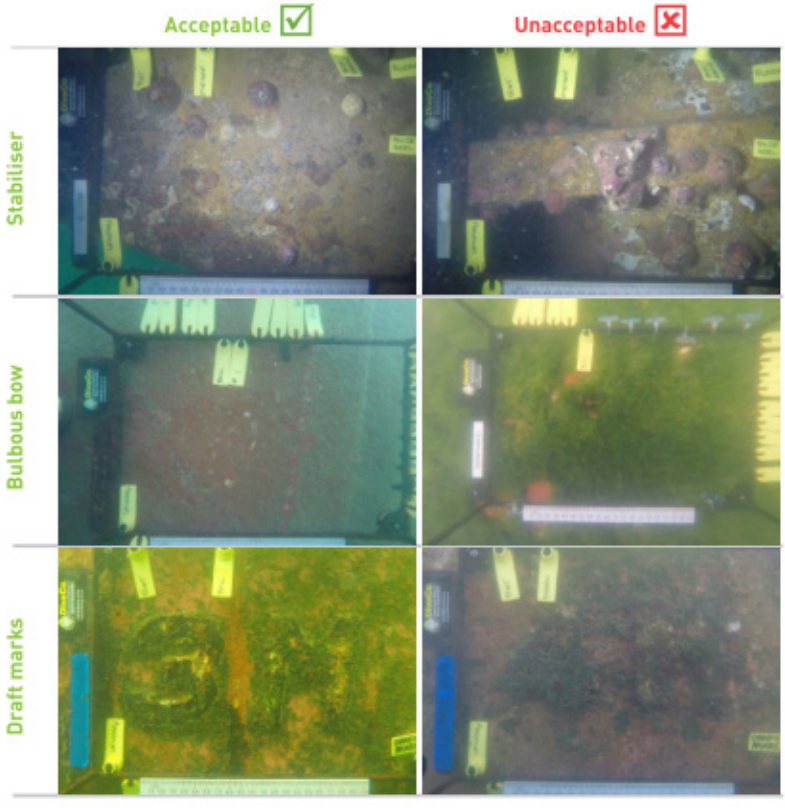
Niche areas

Sea chests

Data Source: **https://www.biosecurity.govt.nz/dmsdocument/27852/loggedIn**

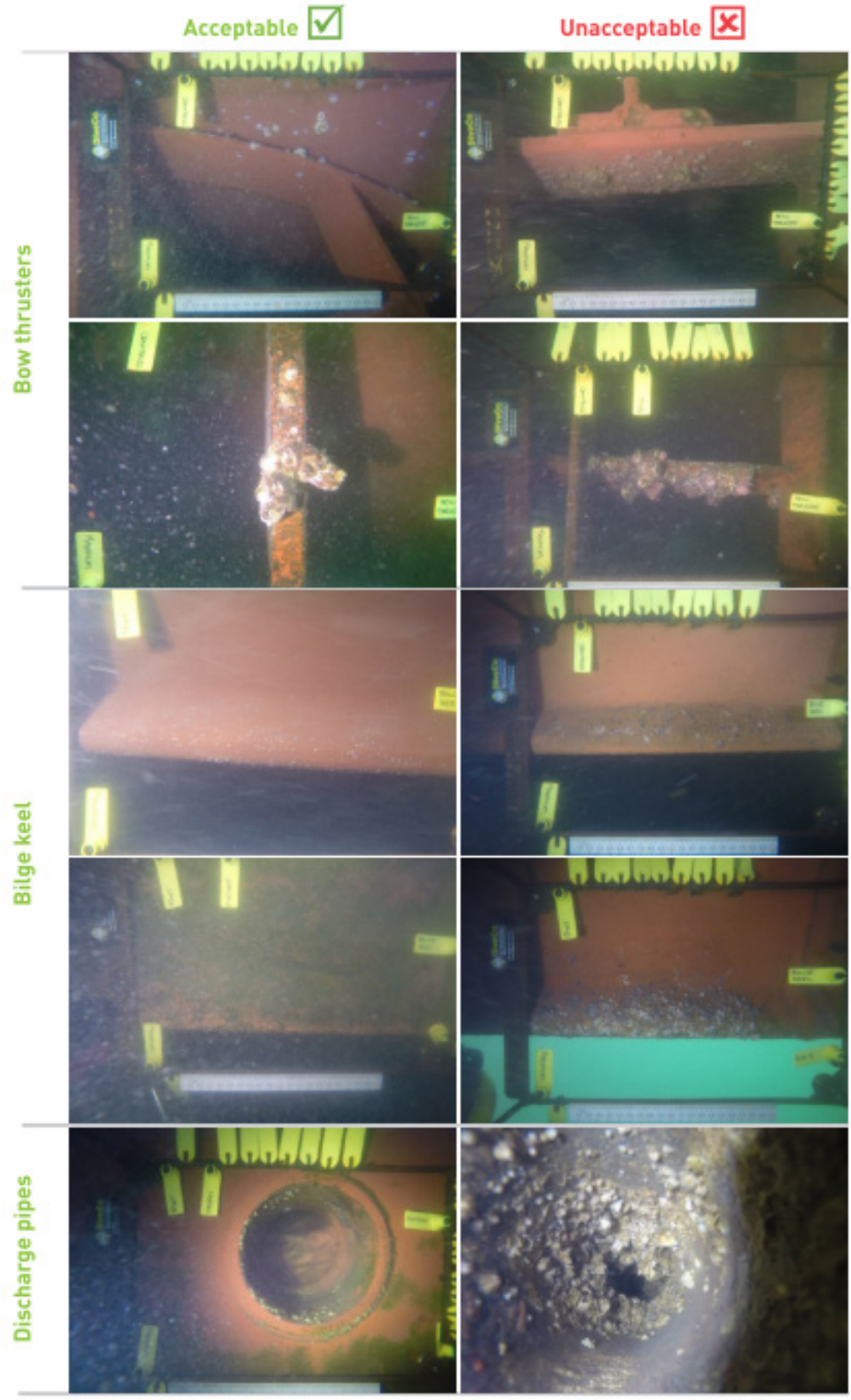
Propeller, rudder, stabiliser, bulbous bow, draft marks





Data Source: **https://www.biosecurity.govt.nz/dmsdocument/27852/loggedIn**

Bow thrusters, bilge keel, discharge pipes



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