



The Craft Risk Management Standard for Biofouling

To manage the risk of invasive marine species establishing in New Zealand waters, the Ministry for Primary Industries (MPI) issued the Craft Risk Management Standard (CRMS) for Biofouling on Vessels. These rules require all vessels to arrive in New Zealand with a “clean hull”. While currently voluntary, the CRMS will become mandatory for all vessels entering New Zealand in May 2018. Until this time, MPI can take action on vessels which pose a severe biofouling risk.

What is a “clean hull”?

The “clean hull” allowance for short stay vessels is a slime layer, gooseneck barnacles and slight fouling (1 - 5% cover) of early stage biofouling (e.g. barnacles, tubeworms or bryozoans) on the hull and in the niche areas. Short-stay vessels are here for less than 21 days, and typically travel at moderate to high speeds, such as commercial cargo, log and some cruise vessels. For long stay vessels, the requirements are stricter; the only biofouling these vessels may have is a slime layer and gooseneck barnacles.

How can I meet the biofouling thresholds?

Short-stay vessels (such as commercial cargo vessels or cruise ships) will be deemed to comply with the threshold by demonstrating continual best practice. The International Maritime Organization (IMO) Biofouling Guidelines are a good example of best practice.

Examples of best practice include, application of an appropriate antifouling coating system (suitable to the operating profile of the vessel); antifouling niche areas; operation of marine growth prevention systems on sea-chests; and in-water inspections with biofouling removal as required, particularly after periods of inactivity for more than a few days.

As long-stay vessels need to meet stricter requirements, operators of these vessels will need to either clean the hull and niche areas less than 30 days before arrival to New Zealand (or within 24 hours after arrival); or use an MPI approved treatment to remove or kill biofouling (if available). This

approach can also be used by vessels wanting to meet the short-stay threshold.

How will we measure compliance?

To demonstrate compliance, vessels arriving into New Zealand will be required to submit information about their biofouling management practice. For short-stay vessels this should include a biofouling management plan carried on board the vessel; evidence of the renewal or application of a vessel antifouling coating system, or results from a recent in-water inspection.

Those that are deemed a high risk, or cannot provide evidence that the hull and niche areas are clean may be questioned further. In some cases a dive inspection may be required, but MPI does not anticipate this will be a regular occurrence.

What are we doing now?

Currently, prior to arrival, a vessel’s arrival documents are assessed to see if there factors indicating that a vessel is severely fouled. Recently, a bulkier vessel was identified as high risk due to, among other things, long periods of inactivity; ageing antifouling paint; lack of demonstrated biofouling management of the hull; and on previous visits biofouling had been observed on the hull, and brought to the attention of the vessel operator.

On arrival the vessel was asked to carry out an underwater dive inspection to verify if it had severe biofouling. Results from the dive survey showed a severe level of fouling (70-80% cover of barnacles and calcareous tube worms), particularly around the stern and in niche areas such as sea chests and gratings, propeller shaft, and sea-water outlets. Based on the above factors, MPI decided to take action to mitigate the risk.

Voluntary compliance is encouraged as early as possible. MPI staff are available throughout the lead-in period to discuss compliance for your vessels and to answer questions about the requirements. For initial contact send an email through to: standards@mpi.govt.nz and we will be able to assist you with your query.

What is severe risk biofouling?

You can view a representation [here](#)

Examples of severe risk biofouling

Type of fouling example

Acceptable or severe risk?

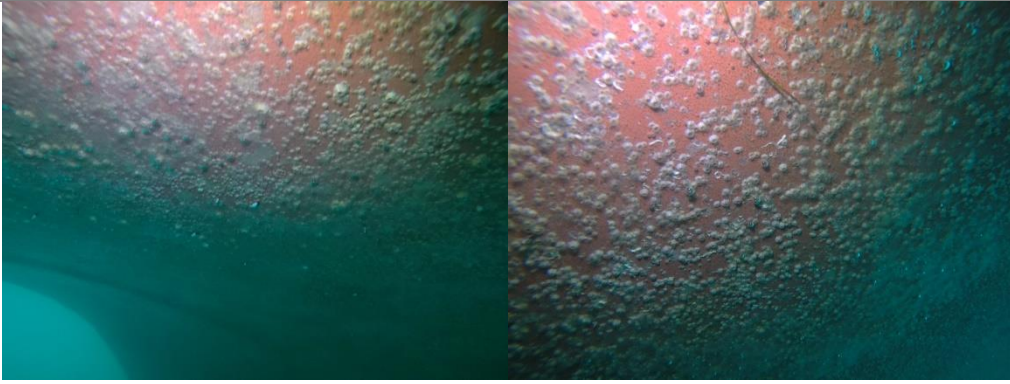


Slime layer less than 50 mm in length



Gooseneck barnacles
(not considered a risk)





Severe biofouling, such as barnacles (or other non-indigenous marine groups) occurring along the hull as a continuous band.



