

Implementation of Craft Risk Management Standard (CRMS) for Biofouling on Vessels Arriving to New Zealand: Update April 2016

New Zealand's Craft Risk Management Standard (CRMS) for Biofouling is due to come into force in mid-May 2018. You can access the standard here http://www.mpi.govt.nz/document-vault/11668.

The new regulation aims to reduce the number of marine pest and disease species arriving into the country in biofouling growth on the hulls of vessels. The main requirement of the CRMS is that every type of vessel (including floating platforms) will need to have a 'clean hull' on entering New Zealand territory. The definition of a 'clean hull' includes an allowance of acceptable biofouling. For vessels arriving for a stay of over 20 days or planning to visit places other than the fifteen ports around New Zealand designated as places of first arrival (POFAs), the allowance is slime and goose barnacles only. For short-stay vessels (visiting for 20 days or less and only to POFAs), the hull allowance includes up to 1% cover of a single species of what are known as "early coloniser organisms" - barnacles, calcareous tubeworms or bryozoans. There is a slightly greater allowance for niche areas.

During the current lead-in period up to 2018, MPI is working to ensure the requirements are well known and understood. MPI can assist any vessel operator or company consider the most practical compliance method for them, including, if necessary, an ongoing strategy under a Craft Risk Management Plan (CRMP) or a code of practice for a company or even a whole industry to follow.

We strongly encourage vessel operators to move towards compliance with the CRMS as early as possible. This will will help reduce the number of new harmful species being introduced into New Zealand's coastal environment, will give the economic advantages of biofouling management now (such as fuel savings) and ready vessels for meeting the standard when it comes into force in 2018.

We welcome contact and can be reached at Standards@mpi.govt.nz.

The Ministry is also preparing

- processes and tools to help vessels reach compliance,
- processes for the Ministry to monitor compliance, and
- tools and processes for dealing with non-compliant vessels.

Progress in various vessel sectors

The CRMS was first issued in May 2014 with the view that a four year voluntary lead-in period would enable shipping and other vessel operators to understand the requirements and develop the approaches needed to meet it.

We have made a good start during the lead-in, working with various vessel sectors to increase awareness of the new requirements and helping operators decide how they will comply.

Our engagement with the cargo vessel sector started at the top by visiting the head offices of the main shipping lines that operate through New Zealand (i.e. the South East Asia/Pacific offices of Maersk, PIL, Swire and Hapag Lloyd) to discuss how well their fleets visiting New Zealand already meet the requirements and what further could be done. Maersk and Hapag Lloyd, in particular, already optimise their hull streamlining to make substantial savings on fuel and emissions.

The cruise ship industry is another sector that is already managing their vessel hulls well. We have, however, been talking to them about meeting the more stringent long-stay threshold when their itineraries include visiting places other than POFAs, such as Fiordland.

Other sectors that have made progress considering their options include the New Zealand Defence Force and New Zealand-based fishing vessels. Both these sectors have vessels that are often laid up in New Zealand and may have non-risk New Zealand biofouling when going out, and subsequently returning through the border, and so may find it difficult meet the 'clean hull' requirement. We are encouraging them to consider equivalent ways of complying, which can be done through a CRMP.

Recreational vessels that arrive after a long voyage cruising to New Zealand have a high likelihood of being fouled but recently inspectors have seen little sign of biofouling on arriving boats. MPI has been using the message of 'clean before you leave a place' to encourage recreational vessels to clean at their last destination before New Zealand. This has been by including information in the New Zealand government agencies' 'information packs' that are distributed to the popular stepping off ports and marinas such as Vava'u in Tonga. On arrival to New Zealand, spot checks on cleanliness of recreational vessels are carried out by inspectors viewing vessels' hulls with an underwater camera on a pole.

The vessels found to be most fouled have been some slow-moving vessels and vessels that move between New Zealand and other countries (such as Australia) for particular projects or when opportunities arise. Examples are tugs, dredges, barges, fishing vessels, and other work boats. We are looking at ways of ensuring these vessels know about the CRMS requirements well in advance of arrival to New Zealand. We need them to be well prepared and have their hulls cleaned and, if feasible, re-antifouled beforehand. We have already been successful in passing this message to operators of vessels working in the oil and gas industry — all the recent incoming rigs have contacted MPI in the planning stages and worked with us to achieve pre-arrival assurance that their biofouling management was acceptable.

Dealing with non-compliant vessels

During the lead-in, MPI continues to take action on vessels with severe risk biofouling. Recent events with incoming severe risk vessels have provided useful learning experiences for MPI for dealing with non-compliant biofouling.

Recently we have issued directions for some vessels with severe risk biofouling to be treated. Some have been slipped and cleaned in approved facilities and some encapsulated (in-water wrapping with plastic until organisms died). A good option would be hull cleaning in-water with capture of the removed biofouling, including small particles, for safe disposal. No approved system is available in New Zealand yet but we hope to have a range of approved systems available before the CRMS comes into force in 2018. Recently commissioned research aims to assist development in this area.

For some vessels the only option available has been to direct a vessel to leave New Zealand as soon as possible and to return only when full cleaning has been carried out.

New Zealand needs an adequate capacity of haul-outs, slips and docks that have been approved as having minimal risk of viable organisms being discharged into the sea for vessels. These are needed for vessel operators to use in maintaining compliant hulls and also, particularly as vessels are still coming into compliance, for non-compliant vessels to be taken out of the water immediately and cleaned (at the owner/operators' expense) under direction of an inspector. Currently, due to the lack of approved facilities, in-water methods that can be quickly deployed and relied upon to prevent discharge of organisms are being investigated for approval. There has been successful use by Northland Regional Council of floating docks and chemical dosing for recreational vessels. Also in-water wrapping of vessels has been used successfully on fishing vessels and other workboats. We have evaluated the usefulness of various techniques and are now putting in place a transparent system for assessing systems and facilities for approval under the CRMS.

Assistance coming

MPI's next piece of work will be the development of guidance to accompany the standard. We invite you to submit ideas, questions and aspects of the CRMS where guidance would be useful.

Also criteria and process for approvals under the CRMS regime are under development. Once approved a list of facilities, systems, and treatments for dealing with biofouling along with a list of providers will be placed on the website at http://www.mpi.govt.nz/importing/border-clearance/vessels/.

In addition, approved providers of hull inspection, both in New Zealand and overseas, are needed and will be listed here. Criteria for approval of these will be posted soon.

We will also provide various forms and templates for hull inspection reports, craft risk management plans, etc.

The MPI website www.mpi.govt.nz will have further information on biofouling in the near future. Check the 'Vessels' pages at http://www.mpi.govt.nz/importing/border-clearance/vessels/— coming soon.

Please contact us at: - Standards@MPI.govt.nz

The bigger picture

We expect that biofouling regulation by other jurisdictions such as the proposed Californian regulation (see http://www.slc.ca.gov/Laws-Regs/Article4.8/Art 4.8 regulation text.pdf) will stimulate interest in new technologies such as hull coatings and hull maintenance systems and lead to more of these coming on to the market in the near future.

MPI is carrying out research at overseas dry docks that service vessels operating in our region. This research will collect information on vessels coming into dock about their maintenance and voyage history since previous antifouling application and the resulting state of the hull. This will contribute towards an International Maritime Organisation (IMO) project monitoring the global trends

in response to the IMO Guideline¹. In New Zealand we are already collecting biofouling management information from every arriving vessel, including whether the vessel has a biofouling management plan tailored to the vessel and whether management is according to the plan as shown by biofouling management records. We will use this information to analyse trends, and it will also feed into the IMO's work.

Useful information

- 1. For yachts and other recreational vessels: New Zealand's new border rules on hull fouling http://www.mpi.govt.nz/document-vault/9153
- 2. For commercial vessels: New Zealand's new biofouling requirements http://www.customs.govt.nz/news/resources/Documents/NZs-new-biofouling-requirements.pdf

Latest research:

- 1. In-water cleaning technologies Review of information http://www.mpi.govt.nz/document-vault/10814
- 2. Procedures for evaluating in-water systems to remove or treat vessel biofouling http://www.mpi.govt.nz/document-vault/10811
- 3. In-water cleaning chemical and biological risks https://www.mpi.govt.nz/document-vault/4092
 - 4. Literature review: In-water systems to remove or treat biofouling in vessel sea chests and internal pipework

www.mpi.govt.nz/document-vault/11821

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¹ The latest version of the IMO Guideline is at http://www.imo.org/en/OurWork/Environment/Biofouling/Pages/default.aspx