Biosecurity New Zealand
Ministry for Primary Industries
Manatū Ahu Matua

Biofouling Regulations and Congestion Issues: Impacts for Industry – Frequently asked questions

The questions below were commonly asked during the webinar series. Some of our participants suggested that an FAQ sheet would be useful as an additional resource for stakeholders.

How are biofouling decisions made?

Biosecurity New Zealand is a branch of the Ministry for Primary Industries (MPI). We work closely with industry to prevent unwanted pests and diseases from reaching New Zealand whilst also enabling trade.

When a vessel is planning to visit New Zealand, the vessel operator will send its biofouling documents to our **Vessel Target Evaluation team** (**vessels@mpi.govt.nz**). They will assess arrival documents and conduct biofouling audits. They will notify you if you have failed and give the reasons for the failure. You can also send them your biofouling documentation in advance. They will assess it for compliance and advise you of what actions may be required to become compliant before arrival. This might take a few days as imminent arrivals must take precedence so please factor this into your planning.

When a vessel fails its audit, **Border Clearance Services** at the relevant MPI port (port of first arrival) will decide on what compliance actions, if any, are required. The compliance actions taken will always be in proportion to the biofouling risk of the vessel. The vessel's biofouling risk will be considered along with a wide range of factors including its declared itinerary, cargo, and any health and safety concerns. They will then issue a Notice of Direction detailing the compliance actions which can include: a dive inspection if insufficient evidence has been provided, restricting itinerary to be as declared for lower risk vessels, or directing a vessel to leave New Zealand's Territorial Waters (NZTWs) in rare cases where the biofouling is severe and poses a significant biosecurity risk to New Zealand.

The **Invasive Species Team** (**standards@mpi.govt.nz**) write, review, and update the Craft Risk Management Standards that apply to vessels. They provide advice to the other MPI teams managing biofouling risk as needed and provide support to operators in creating Biofouling Management Plans and Craft Risk Management Plans. The team also advises operators on how to meet the standards.

What is the science behind the 20-day limit for short stay?

The longer a vessel remains in New Zealand, the greater the risk that the species will spawn or escape from the vessels hull and become established. The 20-day limit for short stay was set to account for the reproductive cycle of the majority of biofouling species as well as vessels' travel time to New Zealand. For more information, please see **this paper** which is available on our website.

What is best practice?

Our definition of best practice comes from the **IMO's biofouling guidelines**. Best practice includes:

- Developing, maintaining, and following a biofouling management plan and keeping records of maintenance activities in a biofouling record book.
- Choosing a suitable Antifouling Coating (AFC) for the vessel's operational profile and ensuring that the coating does not expire. The AFC should ideally be touched up when damaged.
- Conducting regular inspections and proactive cleaning of the slime layer and macrofouling on all submerged surfaces and niche areas.
- MPI recommends yearly inspections for the first two years of an AFC's service life and 6 monthly after that. MPI may also require a more frequent inspection rate if the AFC is significantly damaged, or the risk level of the vessel increases e.g. long lay-ups.
- Installation of MGPS's to assist in treating the sea chest and internal seawater systems.
- Contingency planning for when the vessel falls out of its usual operational profile e.g. additional inspections after long lay ups.

What is the importance of managing niche areas?

Niche areas are protrusions, recesses, areas of the hull lacking AFC, or vulnerable to damage that are susceptible to biofouling. Niche areas can work against the function of AFC. Some (e.g. sea chests and discharge pipes) are sheltered from water flow which reduces the effectiveness of coatings that rely on friction of movement to work. Niche areas may also be more susceptible to AFC damage at docking (e.g. bulbous bow) or have no AFC applied (e.g. docking blocks) which makes accumulation of fouling much more likely. To account for this, we allow niche areas to have a slightly higher percentage cover of early biofouling organisms under the short-stay thresholds. It is essential to manage biofouling in niche areas proactively as part of your biofouling management plan.

What is the difference between managing biofouling for operational versus biosecurity purposes?

When biofouling is managed for operational purposes, biofouling is removed from areas where it will cause drag or less efficient vessel function (e.g. the propeller and flat sides) and contribute to the cost of operating the vessel. This does not always include niche areas (e.g. the sea chest) which are often sheltered and do not contribute to drag, even when heavily fouled. Managing biofouling for biosecurity purposes includes removing all fouling from all areas of the hull and niche areas to prevent invasive species spreading around the globe. This is what we expect vessels to do when coming to New Zealand.

It is important to emphasise to dive companies that any in-water cleaning should manage biofouling for biosecurity purposes. Most international companies are used to only managing biofouling for operational purposes and so may miss key areas if this is not emphasised to them. You can provide them with a copy of our standard and send them to **our website** to ensure that they are aware of New Zealand's requirements.
If they would like more information, they can email us at **standards@mpi.govt.nz** and we can give them more tips or check that their reporting meets our standard.

How does domestic fouling factor in to MPI's decision making?

If the vessel meets long stay requirements on arrival in New Zealand, has the paperwork to demonstrate this and remains in New Zealand, then we can consider any fouling after its arrival domestic and therefore not at risk of introducing a new species to New Zealand.

However, it is rare that short stay vessels arrive meeting these requirements. Even small amounts of fouling can be a biosecurity risk, either through breeding and establishing in New Zealand or harbouring parasites and pathogens that can be detrimental to our native species and marine industries.

If a vessel carries biofouling originally formed in New Zealand but the vessel leaves and comes back, the organisms may have picked up parasites and pathogens or non-native biofouling may have grown alongside it while outside New Zealand. It is difficult to differentiate between domestic and non-native biofouling at this point and so we must treat it all as a risk.

Is consideration given to lay-ups in rivers as they are freshwater and have a current which should assist the antifoul coating? Is the risk lower?

Consideration is given. However, fouling still occurs in both brackish and fresh water. River flow is often not strong enough to encourage sloughing of fouling from the AFC. While in most cases returning to salt water may kill the established fouling, the dead fouling still works against the function of the AFC and creates a platform for marine fouling to rapidly establish in future.

On the other hand, exposing marine species to brackish or fresh water does not guarantee the organisms will die off. Many marine biofouling species can resist exposure to unfavourable environments for extended periods.

It is for these reasons that lay-ups in brackish or fresh water cannot be thought of as creating a "fresh start" for a vessel hull.

Can in-water cleaning take place in New Zealand's Territorial Waters?

In-water cleaning of international vessels is not currently permitted in New Zealand's territorial waters. Therefore, vessels need to ensure that they proactively manage their biofouling before they depart for New Zealand. This will ultimately reduce the likelihood of biofouling related delays and costs when they arrive.

We are constantly investigating in-water cleaning and the ways in which this is being managed around the world with a view to exploring how this could be implemented in NZTW. For this to happen the cleaning technology must meet New Zealand's biosecurity and environmental health requirements through capture and/or treatment. Currently, we are yet to find in-water cleaning or treatment technology capable of doing so. We are continuing our research and welcome stakeholders to approach us if they believe they have a suitable technology.

Is there a list of approved companies to provide underwater hull inspections and/or in-water cleaning?

There are currently no approved companies for underwater hull inspections or in-water cleaning.

Biosecurity New Zealand are in the process of creating a new underwater inspection standard that will set the minimum requirements for underwater inspection report documentation and imagery. It will explain how providers can be approved by MPI to deliver hull inspection evidence that is appropriate to be used for assessing compliance with the standard. This will ensure all evidence provided will enable MPI to make timely and accurate decisions on vessels' compliance with the Standard. We aim to initially approve domestic providers here in New Zealand, before commencing approval of offshore providers. This will ultimately result in reduced delays and increased certainty for industry and MPI. This standard will be released for consultation in 2022. In doing so, we will be engaging with companies around the world to increase awareness and the understanding of our requirements.

Will reports created by underwater drones/remotely operated vehicles or underwater cameras be accepted?

Yes! Provided they meet our information requirements, we will accept them. We are pleased to see the quality of some recent reports created via Remotely Operated Vehicles and look forward to seeing how the sector progresses over time.

Reports need to have clear, time and date stamped photos that show where on the vessel they were taken. Reports need to cover all hull and niche areas. The report also needs to list the biofouling organisms found in each area and the percentage cover. Videos can also be very helpful. Ask for a Sharefile link from our Vessel Target Evaluation team when you send your arrival docs if you are providing a video with your biofouling documents. You can find our **dive template here** which will help you check that your report meets our requirements.

Are congestion issues and the resulting layups increasing biofouling risk on vessels?

It is likely that biofouling risk has increased due to the congestion issues brought about by the global pandemic. Congestion at ports leads to longer lay ups for vessels. When a vessel is stationary for long periods of time, biofouling is more likely to form as AFCs rely on vessel movement to work effectively. We are keeping a close eye on the situation as it develops and working to understand the impacts this will have on our stakeholders and the overall biofouling risk.

How can vessels ensure that they meet requirements in the event of itinerary disruptions?

The best advice we can give is to ensure that you are following best practice as outlined above. We can help to provide support in creating Biofouling Management Plans that also incorporate contingency plans for when a vessel falls out of its usual operational profile e.g. when the vessel gets caught in port congestion. If you think that an itinerary disruption to your New Zealand itinerary is likely, there are some steps you can take to reduce the likelihood of biofouling related costs and delays:

Before arrival:

- Ensure the vessel meets our requirements – e.g. organise a vessel inspection and clean (if needed) prior to departure, and make sure the required information is current and available. In all cases, if your previous inspection showed any high-risk biofouling (e.g. mussels) or fouling in excess of the thresholds, ensure that you manage the risk before you depart for New Zealand. If you are heading to a congested port you should consider an inspection and act of any fouling found if: your AFC is close to its expiry date, your UWI is older than 6 months, you have had any long layups since your last inspection, and/or a previous inspection showed fouling close to our thresholds.
- If unsure, contact **vessels@mpi.govt.nz** prior to departing for New Zealand to determine your vessel's compliance with the requirements – this will provide sufficient time to take any actions necessary to either show compliance or become compliant. We must prioritise imminent arrivals so please give them a few working days in which to assess your vessel.

After arrival:

- Contact **vessels@mpi.govt.nz** and the relevant MPI port office when it becomes apparent that a delay is likely.
- Provide up to date information showing evidence of compliance before the vessel's stay exceeds 20 days – this allows Biosecurity New Zealand to effectively assess any risk that vessels may pose and gives vessel operators sufficient time to factor any necessary biofouling management actions into their itinerary. This will minimise costs and delays.

How do we get more involved?

We will shortly be sending out our new quarterly newsletter: Vessel Biosecurity Quarterly. In here, we will list upcoming engagement opportunities and how you can get involved with the future of the standard. This will give a heads up for upcoming consultations too. You can email **standards@mpi.govt.nz** at any point if you would like to join our mailing list for future webinars and newsletters or have any ideas for new resources, stories for our newsletters or require any information from us.