



Submission form

Proposed Australian Biofouling Management Requirements

Consultation Regulation Impact Statement

Please use this form to make your submission and then send it to:

Email (preferred): IMS-Program@daff.gov.au

or post: Invasive Marine Species Program
GPO Box 858
CANBERRA ACT 2601

Closing date: 29 February 2012

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Is ALL of your submission confidential?

(the whole submission is provided 'IN CONFIDENCE')

Yes No

Is PART of your submission confidential?

(relevant part provided under separate cover and clearly marked)

Yes No

Do you agree to your submission being made publicly available?

Yes No

If no, do you agree to your name and state/territory being listed?

Yes No

Please note:

- For submissions made by individuals, no address details, except your name and state or territory, will be published.
- At the discretion of the Department of Agriculture, Fisheries and Forestry, submissions will be placed on the DAFF website at the end of the submission period unless marked confidential.

- Confidential material should be provided under a separate cover and clearly marked 'IN CONFIDENCE'.
- Copyright in submissions resides with the author(s), not with DAFF.
- Submissions cannot be accepted unless accompanied by this cover sheet.

Your submission

Please provide any comments you have on any of the questions posed in the Regulation Impact Statement. If you wish to comment on other aspects of the Regulation Impact Statement, please see question 9.

Q1. Do the proposed operating time restrictions on vessels achieve an appropriate balance between minimising biological risk (which increases with time) and minimising the impact on vessel operators (who may need more time)? If not, why and what would be a better balance?

The timelines are appropriate for medium risk vessels arriving for very short visits. However, high and extreme risk vessels have a higher probability of containing species of concern (SOC), referred to here as marine pests. It is highly unlikely that the interview, hull inspection and determination of the presence of any marine pests can be completed within 48 hours of arrival.

The better alternative is to confirm the absence of any marine pests prior to departure from a foreign port. This practice is currently commonly followed for nontrading vessels arriving in Western Australia that are mobilising for projects subject to Ministerial Conditions under the WA EPA Act. A wide range of vessels are currently being inspected overseas, including dredges, tugs, barges, drilling rigs, etc. If a vessel is inspected overseas by a recognised inspector, the vessel is allowed to enter WA waters if no potential marine pest species are found. If a potential marine pest is found the vessel must be cleaned and re-inspected, with no pests found on the subsequent inspection(s) before entry is permitted.

An alternative is for the vessel to be inspected within 48 hours of arrival in WA. The vessel is not allowed to operate until it is confirmed not to have a marine pest. If a marine pest is present the vessel must be taken from the water and cleaned. If the vessel cannot be cleaned out of water in WA (i.e. it is too large, facilities are fully booked, etc.), the vessel must return overseas and be cleaned. Most vessels where this has happened have gone to Singapore at an anecdotal cost of \$ 5 million. The flow-on costs to a project from the resulting time loss are reputed to have been even larger. Awareness of such incidents in the industry has resulted in a high degree of compliance.

All costs are borne by the vessel owner/operator.

A similar mechanism could be used for fishing boats and yachts.

An alternative for yachts is the system used in the Northern Territory where vessels entering the small boat marinas of Darwin Harbour must submit documentation on their risk profile to NT Fisheries. NT Fisheries then determines whether the vessel must be inspected, and if necessary cleaned. NT Fisheries bears the costs for these smaller boats.

Q2. How might vessel operators' behaviour change in response to the proposed regulations?

If the requirements are mandatory, the vessel operators will be required to follow them. If they are not mandatory some operators will adhere to the intent, but others will not.

As described above, the very high costs to some operators of marine pest detections in vessels in WA and having the vessels cleaned in Singapore has generated a much higher level of compliance.

In 2011, the *WA Fish Resources Management Act 1994* was amended to give the Chief Executive Officer powers to combat a marine pest incursion and then to recover the costs from the person or organisation that introduced the marine pest. Such costs could be substantial. The removal of *Mytilopsis sallei* from three small marinas in Darwin in 1999 cost \$ 2.2 million, a figure that would be substantially larger in 2012 dollars or for a broader incursion.

Q3. What specific types of flow-on costs and benefits to the Australian economy of the proposed regulations might be significant?

The regulatory costs will add a minor burden to the Australian economy. However, there is a much greater potential dollar cost from the establishment of a marine pest in Australian waters, plus the loss of environmental amenity. The impact of marine pests on Australia's marine biodiversity is still poorly known, as are the potential consequences of successful incursions.

Q4. The estimates of costs are based on average vessel numbers from 2002-2009. Is there any activity or trends that suggest any significant change in vessel movement or increased numbers of arrivals?

There has been a considerable increase in arrivals of extreme risk vessels in northern Australia as a result of the resources boom. This is likely to continue and increase further. The pattern of ship movements is changing, both in terms of international arrivals and coastal shipping. In addition, there has been a substantial increase in the number of cruise ships arriving in Australian ports. Anecdotally, the number of cruising yachts is also increasing, and these are far more difficult to control.

Q5. Are the cost assumptions consistent with industry experience? (see appendix D for all cost assumptions). Are there better estimates of costs available?

AMSA is unable to comment on this question.

Q6. Are the other assumptions used to estimate costs and benefits reasonable based on industry experience? If not, how could they be improved?

AMSA is unable to comment on this question.

Q7. The methodology for estimating the economic value at risk relies on a series of assumptions about the value of commercial fishing and the Great Barrier Reef. Are there more plausible assumptions or approaches that could be used?

Most of the pest species that have become established in Australia are in temperate waters. While the GBR is a key marine asset of international significance, to date the GBR has been little affected by marine pests. The threat is Australia wide. With the Indo-Pacific distribution of most tropical species, the GBR may be at a lower level of risk than a temperate system. In addition, there is strong evidence that undisturbed natural habitats are relatively more capable of resisting invasions than disturbed systems such as ports, lessening the accuracy of estimates based on a tropical, relatively undisturbed system.

Even within temperate waters the distributions of marine pests are variable. For example, the distribution of the European fanworm *Sabella spallanzanii* is not uniform along the southern coast of Australia. It is concentrated in the disturbed environments of ports and harbours, and does not occur on open coasts. Even in environments where it occurs, populations of the fanworm come and go. Similar patterns have occurred with the date mussel *Musculista senhousia* and other species.

Concentrating on the GBR is simplistic and inaccurate. An analysis with a broader geographical coverage and more detail is required.

Q8. What other evidence is there of the potential impacts of non indigenous marine species becoming established in Australia?

There is a wealth of scientific literature that details the potential impacts of such establishment. The threat from vessels is real, as evidenced by the scores of detections made of marine pests on vessels mobilising to Western Australian resource projects.

Q9. What is industry's view of the likely effectiveness of a voluntary approach to reducing the risks associated with biofouling compared to a regulatory approach?

A voluntary approach will not work.

Q10. Do you have any other comments on the Regulation Impact Statement?

AMSA welcomes the intent of the approach to preventing the establishment of marine pests in Australian waters and the work of DAFF and the Marine Pests Sectoral Committee (and its predecessor group the National Introduced Marine Pests Coordination Group). Many members of AMSA have worked in various capacities on these problems since they were first recognised. A well considered national approach is urgently required.

A number of AMSA members participated in the workshops held in Australian cities in late 2011. However the workshops were poorly advertised and known only to a few members. There was no apparent attempt to advertise the workshops directly to organisations such as the state museums, where most of the marine taxonomists work. AMSA is seriously concerned about the implementation of the National System as described in the workshops:

- Currently, vessel operators are faced with uncertain regulations that differ between states and the NT. A national approach is critically required. As the DAFF documentation demonstrates, and is described above, WA and the NT have recognised the problems of marine pests and are acting proactively to prevent their arrival. Unless the National System meets the requirements of WA and the NT, they will continue with their stricter requirements and the National System will in fact continue to be fragmented.

- The workshops stated that a new list of marine pests is being developed that will not include marine pests already introduced into Australia. However, the documentation provided by DAFF includes the North Pacific seastar as an example of a species that has caused considerable damage. Under the proposed changes this and other such species would no longer be included as they are already in Australian waters. This is untenable. Every effort should be made to ensure that the North Pacific seastar and other species already in Australia are not further spread into additional Australian areas.
- The workshops recognised the considerable difficulties in obtaining accurate identifications of potential marine pests in a timely manner. There are very few taxonomists in Australia capable of identifying these organisms. In some groups there may not be a taxonomist available. AMSA has been pointing this issue out to government for many years. The suggestion made at the workshops to have potential marine pests identified from photographs sent by email may work for a few groups but will not work for most. There have already been very serious misidentifications made on the basis of photographs. Accurate identifications for many of the groups will require that a specialist taxonomist have specimens in hand for analysis. This will take time, and cannot be done within 48 hours, which is why high and extreme risk vessels should be precleared prior to departure from a foreign port. AMSA recognises that the development of the taxonomic skills required will be a time consuming and costly exercise, but accurate identifications underpin the approach to this critical issue.

As an example of the difficulty in obtaining reliable identifications, consider the polychaete worm *Hydroides dianthus* that is on the national marine pest list. There are only two or three specialists in this group in Australia. The family has 46 recognised genera and there are 89 valid species in the single genus *Hydroides*, many of which are present as fouling species. Accurate identifications require dissection by a skilled taxonomist knowledgeable in the group. Identifications cannot be based on photographs and will never be completed within 48 hours.

Preparing a submission

Please provide your comments on the *Consultation Regulation Impact Statement* using this form. The department is particularly keen for your input on the questions posed in the RIS (questions 1-8). However you are welcome to provide your views on any aspect of the RIS (question 9).

Please note that you are not required to answer all questions, only those that you wish to respond to. There is no limit on the length of your submission.

Email lodgement is preferred

All submissions must use the submission form.

If possible, submissions should be lodged by email as a Word or RTF document. If providing hard copies, they should be typed or clearly written on single-sided A4 paper.

Confidentiality

If you wish your whole submission to be kept in confidence, this should be clearly indicated on the cover sheet and at the front of the submission. Confidential material should clearly marked 'IN CONFIDENCE'.

If you want only part of your submission to be confidential, please mark it clearly and put that part on a separate page(s). The secretariat will endeavour to keep any such submissions confidential but cannot provide an absolute guarantee of confidentiality because certain confidential information may be required to be disclosed by law or to the Parliament.

Unless you request that your submission be treated confidentially, it may be made publicly available on the Department of Agriculture, Fisheries and Forestry website. In addition, unless you request otherwise, your name and state or territory will be listed on the website.

Lodging submissions

Submissions are required to be lodged with the Invasive Marine Species Program by **Tuesday 29 February 2012**. The email and postal addresses for submissions are provided at the top of the cover sheet.

Further information

If you require further information on making a submission contact the Invasive Marine Species Program by email at IMS-Program@daff.gov.au.