



**Australian Shipowners Association**

**Quarantine and Biosecurity Review Panel**

*Independent Quarantine and Biosecurity Review*

**Australian Shipowners Association  
Submission**

**April 2008**

## 1. Prevention and Management of Invasive and other Exotic Marine Pests

Australia's inshore marine waters have been colonised by many hundreds of exotic marine species and a significant number of these have had deleterious environmental, economic, social and human health impacts. The prevention and management of exotic marine pest incursions has been considered a priority issue by Australia's National and State Governments, leading to the development of a National System for the Prevention and Management of Marine Pest Incursions ("the National System") which is scheduled for implementation later this year after more than 10 years in development.

The Australian Shipowners Association (ASA) recognises the importance of the marine pest issue and has been actively involved in the development of the National System through membership of the National Introduced Marine Pest Coordination Group (NIMPCG), the group charged by Government with the responsibility for developing the National System, and in undertaking R&D to support and inform National System development.

ASA considers that AQIS needs to assume a primary responsibility in, not only pre-border and border management of marine biosecurity, but also in the post-border, uniform implementation of domestic measures to manage the risks associated with translocation of established, but not yet widespread, invasive marine pest species within Australian marine waters. This is consistent with the current AQIS inter- and intra-state quarantine operations reflecting regional differences in pest and disease status, as part of their wider plant and animal health responsibilities.

However, for the shipping industry, management measures and requirements implemented by AQIS for marine pest management need to provide clarity, certainty and consistency, so that shipping operators can plan and implement actions to minimise the risks of their operations to meet AQIS requirements without disruption or undue delay to voyages into and within Australia. We have concerns that this clarity, certainty and consistency is not fully evident, particularly in the recently drafted Biofouling Management Policy proposed for implementation later this year. In brief, our concerns are that this policy is largely reactive (border), rather than proactive (pre-border), which we consider to be a more effective method of risk reduction for shipping. We also have concerns that the reactive approach could encourage the conduct of practices such as in-water hull cleaning in international ports of call prior to entering Australia, despite in-water cleaning being effectively banned in Australia due to its potential environmental harm.

For the purpose of this submission, 'pro active' and 'reactive' approaches are specifically defined as:

- Pro active - concentrated effort on promotion, use and further development of industry/sector guidelines for biofouling prevention and targeted communication of specific marine pest prevention message to each industry/sector. In regard to the shipping industry, continued communication through international forums, and in particular the International Maritime organisation is of particular importance.
- Reactive – effort on detection of biofouling through pre border and on arrival inspections of the underwater surfaces of vessels with the potential to require vessels to be removed from Australian waters or dry docked within Australia or overseas to remove biofouling growth.

The following sections of this submission will provide comments on the role of AQIS against the issues for consideration outlined Issues Paper issued by the Quarantine and Biosecurity Review Panel on 14 March 2008 (“the Issues Paper”).

### **C1. Risk across the quarantine and biosecurity continuum**

The prevention and management of exotic marine pest incursions fits Australia’s ALOP of very low risk, but not zero, as zero risk could only be achieved by closing our borders to all forms of marine transport. However, it is not currently clear in the proposed AQIS biofouling management policy that the ALOP is to be applied in a consistent manner, as the risk assessment component of the process proposed by AQIS to manage pest risks on international vessels is not detailed. We also have concerns that some state and territory governments are not implementing policies and requirements consistent with the national ALOP, adding to the uncertainty associated with marine pest risk assessment and management.

“Are threats to Australia’s marine environment and fisheries arising from biofouling on ships’ hulls and organisms in ballast water best handled in a quarantine and biosecurity framework or some other framework?”

ASA believes that this threat must be treated uniformly and consistently both in Australia and with relevant international conventions and other instruments. We have therefore supported the development of the National System as a means of achieving this consistency, and see the National quarantine and biosecurity framework as best able to implement and manage this system. However, we do have concerns that the required level of clarity, certainty and consistency is not yet assured across the national, state and territory quarantine and biosecurity continuum, both for ballast water and biofouling management.

“Does AQIS implement risk management in a manner consistent with the advice/recommendations provided by Biosecurity Australia...”

In developing the National System, NIMPCG undertook extensive and prolonged assessment of marine pest transfer risk associated with all maritime vessel sectors and other potential vectors. From this process, the proposed National System charged AQIS with border management of small international yachts which were assessed as posing a high risk for exotic marine pest introduction. The small international yacht protocol was implemented as an intended 12 month voluntary phase in October 2005 with an intention (as still stated on the AQIS web-site) for the protocol to become mandatory in October 2006. However, restriction of the Quarantine Act did not permit legislation to be restricted to craft < 25 m in length, and the legal process required uniform application to all vessels.

ASA have concerns that the broadening of principals of the small international yacht protocol and supporting legislation to vessels of all types and sizes, particularly the process of risk assessment, inspection procedures, granting of pratique, and proposed mitigation measures is not practical across all vessel sectors, nor does it reflect the considered discussions within NIMPCG and proposed risk reduction measures across these sectors. AQIS have moved the priority from proactive measures, which are considered by us to be the most effective means of risk reduction, to an emphasis on reactive measures, which are both difficult to implement, often impractical, and pose a risk of disruption and undue delay to ship voyages.

“Are Australia’s emergency response plans for exotic pest and disease outbreaks adequate?”

The Consultative Committee on Introduced Marine Pest Emergencies (CCIMPE) has been established to address new incursions or range extensions of agreed pests of concern. Several major characteristics of marine species pose problems in emergency responses to marine pest issues:

- The marine environment around Australia is a continuum, which had posed difficulties and delays in response to new outbreaks of invasive species beyond their normal range (e.g. the green alga *Caulerpa taxifolia* in NSW and SA) and enables established species to spread uncontrollably (e.g. the Pacific sea star, Japanese kelp, broccoli weed and the red seaweed *Grateloupia turuturu* in parts of south-eastern Australia).
- Exotic marine species are often not detected until well established, rendering eradication attempts ineffective unless the species is environmentally constrained. Further, no national system to facilitate early detection of exotic marine species incursions is in place.

The Australian experience is that there has only been one successful eradication of an exotic marine pest species in our waters: the black striped mussel *Mytilopsis sallei*, which was confined to enclosable marinas in Darwin.

ASA believes that the consequences of the limited effectiveness of emergency response to new marine pest incursions further increases the importance of proactive vector management to meet Australia's ALOP for exotic marine species.

## **C2. The Legislative Framework**

AQIS have determined that the Quarantine Act 1908 is the appropriate legislation to manage marine pests identified as potentially carried as or within biofouling. However this requires the proclamation of specific taxonomic entities as "quarantinable pests". The problems of this approach are that:

- Specific taxonomic entities are difficult to identify, not only in the field, but often even by specialist taxonomists (notwithstanding the dearth of specialist marine plant and invertebrate taxonomists in Australia)
- The "trigger list" of potential marine pest species used by AQIS as a base for the proclaimed list of quarantinable pests is based on a best assessment of risk species which have invasive species elsewhere and does not include all species that could pose a marine threat
- AQIS has attempted to define biofouling levels which may be indicative or facilitate the presence of marine pests, but these definitions are qualitative, open to personal interpretation, and overly restrictive if imposed across vessel sectors with long docking cycles

ASA considers that the Quarantine Act 1908 does not provide a suitable legislative framework for managing the threats posed by marine pests. Again, proactive vector management is seen as the most appropriate and effective approach to risk minimisation.

## **C3. Jurisdictional and institutional arrangements**

ASA wishes to again highlight the need for clarity, certainty and consistency across all levels of government in the implementation of regulations and other measures to manage the risks of exotic marine species translocation in both ballast water and as biofouling.

Legislation in States and Territories needs to be supportive and consistent with the National framework which, in turn, should be consistent with relevant international conventions and other regulatory instruments. For shipping, border

and post-border (including inter- and intra-state) measures need to be coordinated nationally through a single interface.

Alternatively, ASA supports the implementation of Commonwealth regulation and other measures to manage the risks of exotic marine species translocation for the international and domestic shipping industry.

## **C5. Communication and consultation**

NIMPCG has enabled industry involvement and contribution to the development of the National System. However, most recently there has been a notable reduction in the extent of considered responses to consultation as the planned implementation date looms, and the involvement of AQIS has increased.

Communication is considered an essential component of proactive management measures, but the communication needs to be correctly targeted. For marine pest issues, ASA can provide a conduit for communication to the industry and other peak industry bodies could act for their industries. ASA is of the view that other important target audiences in regard to shipping and other vessels are the shipyards, slipways and vessel maintenance facilities, where many proactive measures could be implemented.

In regard to the Spotted Anything Unusual? Campaign, a similar program could be exceptionally beneficial in regard to biofouling marine pests if targeted at those undertaking vessel maintenance. Some similar programs have been implemented in some States but focused on detecting exotic species in the marine environment.

## **C6. Research**

The National Strategy for Introduced Marine Pest Research and Development 2006-2016 (the National R&D Strategy) provides strategic direction for R&D investment under the National System to ensure that R&D outcomes provide “timely and relevant advice to underpin marine pest management”. Under ‘Vector Management R&D Requirements’ within the National R&D Strategy, the need to “assess the effectiveness of current treatment options for non-ballast vectors (e.g. antifouling paints and marine growth protection systems)” is listed as a high priority.

To our knowledge, despite this high priority, there are no R&D projects currently funded by AQIS or Biosecurity Australia to evaluate options for biofouling management on ships and to validate risk reduction measures proposed in the National System “Biofouling Management Guidelines for Commercial Shipping”.

Such risk reduction measures are a cornerstone of proactive action to minimise the risk of introduction of exotic marine pest to Australia, but their validation will

take time because of the relatively long docking cycles of commercial ships, which are commonly between 3 and 5 years, and the need to verify the efficacy of the measure through to the latter part of the docking cycle. Results from this R&D would also enable Australia to actively inform and facilitate the development of international measures for the management of biofouling through the International Maritime Organization which would heighten Australia's level of protection.

More generally, ASA considers there is a need for an entity independent or separate from AQIS and the NIMPCG Secretariat with relevant skills and expertise to assess, prioritise and allocate R&D projects and funding to support the National System. The forerunner to NIMPCG, the Australian Ballast Water Management Advisory Council (ABWMAC), had a separate Research Advisory Group (RAG) of scientists from research institutions around Australia and technical experts from the shipping industry to perform this role, but no similar entity has since been formed. Such an entity would hopefully ensure that limited R&D funds are expended in the best possible manner to achieve significant lowering of risks of exotic marine pest introduction.

## **2. Quarantine Waste Management**

While recognizing the importance of maintaining effective quarantine procedures, ASA would welcome further discussion of a) the availability of reception facilities for quarantinable waste and b) the treatment of recyclable quarantine waste.

In line with Annex V of MARPOL, operators are required sort their waste on board in order to complete their garbage record book and many companies require their vessels to undertake detailed waste recycling programs. This on board effort to reduce environmental impacts is often at odds with the Australian procedures in relation to quarantinable waste.

ASA is of the view that better integration of Australia's quarantine procedures with waste management principles and MARPOL requirements should be, at the very least explored to allow the industry to further reduce its burden on the environment from a waste management perspective.