



Department of the Environment and Heritage

Office of the Secretary

Ms Margot Kerley  
The Committee Secretary  
Joint Committee of Public Accounts and Audit  
Parliament House  
CANBERRA ACT 2600

Dear Ms Kerley

Thank you for your letter of 12 April 2002, inviting the Department to provide a written submission to the Joint Committee of Public Accounts and Audit (JCPAA) on Australia's quarantine function.

The Department has a significant and ongoing interest in Australia's quarantine function. This interest is manifested through the Department's responsibility for the new regulatory regime for the export and import of wildlife and wildlife products under the *Environment Protection and Biodiversity Conservation Act 1999*, through to its involvement in the protection of the Australian environment from the accidental introduction of marine pests and pathogens.

In all areas of quarantine interest to the Department there is a need for Commonwealth, State and Territory agencies, as well as the private sector, to work effectively and efficiently together if Australia is to remain relatively free from imported organisms that may have the potential to cause a significant impact on Australia's natural environment.

Thank you for the opportunity to present our submission.

Yours sincerely

Anthea Tinney  
Acting Secretary

6 June 2002

# THE DEPARTMENT OF THE ENVIRONMENT AND HERITAGE SUBMISSION TO THE REVIEW OF AUSTRALIA'S QUARANTINE FUNCTION

## INTRODUCTION

This submission examines four areas of importance to Environment Australia with regard to its ongoing involvement in quarantine matters: the development and application of Import Risk Analyses, the import and export of wildlife and wildlife products, the control of live imports, and the protection of the Australian environment from introduced marine pests.

## DEVELOPMENT OF IMPORT RISK ANALYSES

As noted in *Audit Report 47, 2000-2001, Managing for Quarantine Effectiveness*, Environment Australia had significant concerns with past consultation and risk assessment processes for developing Import Risk Analyses (IRA) (eg. the Draft IRA on the Importation of Apples From New Zealand).

These issues have now been largely addressed by the revised arrangements established under the *Draft Administrative Framework for Import Risk Analysis* recently prepared by Biosecurity Australia. The framework provides for the involvement of Environment Australia at the beginning of the IRA process to ensure that environmental considerations are appropriately taken into account. Environment Australia is very supportive of the recent enhancements to the consultation and IRA assessment processes undertaken by Biosecurity Australia.

Biosecurity Australia and Environment Australia have also adopted additional informal consultative arrangements to assist in the development of the more environmentally significant IRAs. As an example, specific informal liaison arrangements were established during the development of the IRA on Bananas from the Philippines in recognition of the significant environmental issues that the IRA will need to consider (eg. potential to introduce diseases that could infect native species and require extensive chemical spraying to control).

However, while Environment Australia is readily able to supply advice on general aspects of environmental management, it is not able to provide the detailed biological analysis that is required to support IRAs in all cases. Although not a statutory requirement, Environment Australia does make every effort to provide assistance to the IRA teams in finding suitably qualified personnel to serve on the Risk Assessment Panels that produce IRA's.

As also noted in *Audit Report 47, 2000-2001, Managing for Quarantine Effectiveness*, Environment Australia and Biosecurity Australia are in the process of developing a Memorandum of Understanding (MOU) to further clarify working relationships, roles and responsibilities under the *Quarantine Act 1908*.

It is expected that the MOU will:

- enhance arrangements for the integration of Environment Australia's advice into the IRA policy process, particularly for those IRA's that are considered to present substantial environmental issues; and
- establish a mechanism for ongoing consultation between agencies on quarantine policy matters generally.

The development of the protocol is not designed to address, or substitute for, the Director of Quarantine seeking the advice of the Environment Minister under s.11C of the *Quarantine Act 1908*.

## **IMPORT AND EXPORT CONTROLS ON WILDLIFE AND WILDLIFE PRODUCTS**

Environment Australia administers the *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act), which controls, amongst other things, the import and export of wildlife and wildlife products (dead or alive) into and out of Australia. As such, with respect to the regulation of such imports and the treatment of illegally seized specimens, the EPBC Act and the *Quarantine Act 1908* may be required to operate concurrently in relation to a specific quarantine matter.

### **Procedures for regulating live imports under the EPBC Act**

Part 13A of the EPBC Act regulates, amongst other things, the import of non-native species that pose a potential risk to the Australian environment. This is achieved through the establishment of a list of specimens approved for live import. Any specimens not appearing on the list will not be given import approval from Environment Australia.

Sections 303EC and 303EJ of the EPBC Act provide that new species can be added to the list only after their potential effects on the environment have been fully assessed to the satisfaction of the Commonwealth Minister for the Environment and Heritage.

A decision to amend the list resides with the Minister for the Environment and Heritage. If approved, the amendment will be made public by instrument published in the Australian Government Gazette. The amendment may also be disallowed in Parliament, in which case the species cannot be approved for import.

### **Risk analysis for new species for live import**

Environment Australia is in the process of developing procedures that will ensure the risks associated with adding new species to the live import list are fully assessed. Environment Australia recognises that an integrated Commonwealth approach to regulating live imports would be beneficial to the Commonwealth and to importers of live specimens. In some instances the costs associated with import risk analysis of live imports can be substantial for both the Commonwealth and importers due to procedural differences under the Quarantine Act and the EPBC Act. Discussions are progressing with Biosecurity Australia with the view of developing a streamlined Commonwealth approach for import risk analysis.

### **Border controls on the import and export of wildlife and wildlife products**

Quarantine Officers are authorised to enforce the wildlife protection provisions covered by Part 13A of the EPBC Act. These provisions apply to wildlife and wildlife products, both live and dead.

Preliminary discussions were held with AQIS when the wildlife protection provisions were being redrafted for inclusion in the EPBC Act. Environment Australia recognised the potential benefits of integrating the operations under the EPBC and Quarantine Acts, particularly as seizures often trigger both Acts. AQIS staff would also bring greater scientific

expertise at the barrier to the administration of Environment Australia's legislation, which would assist in on-the-spot identifications.

Environment Australia recognises that where overlapping requirements exist, there may be opportunities to streamline the seizures and inspection procedures required by both agencies. Streamlined procedures would enhance the capacity of border control agencies to reduce duplication and increase cooperation in relation to wildlife protection legislation.

Environment Australia is investing in state of the art specimen identification software to assist in this process.

It has been agreed that Environment Australia and AQIS will develop agreed operating procedures before AQIS officers specifically administer wildlife protection provisions. A MOU has been proposed by Environment Australia to formalise this agreement in the near future. A protocol already exists to harmonise the activities of Customs, AQIS and Environment Australia in relation to live seizures.

### **Management of illegally imported live specimens**

Quarantine functions also overlap with functions of Environment Australia in relation to the treatment of seized, illegally imported live specimens. Appendix I of the Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES) offers the highest level of protection from overexploitation from trade, and includes species threatened with extinction. The preferred treatment of seized CITES Appendix I live specimens, subject to quarantine requirements, is to locate a suitable zoo or conservation breeding facility in which the specimen can be placed. Facilitating such action may require the cooperation of both Australian and overseas quarantine services because, in some instances, this may involve the re-export of specimens to suitable overseas facilities.

To-date, the treatment of live seized imported specimens has been dealt with on a case-by-case basis between Environment Australia and AQIS. This approach has proven to be effective given the diversity of issues that surround each seizure.

There are a number of issues to resolve with AQIS, before AQIS engage in seizing wildlife and wildlife products under the EPBC Act, such as issuing identity cards, payment for services and training. Environment Australia proposes to resolve these issues with AQIS in the near future through the development of the above mentioned MOU relating to Part 13A of the EPBC Act. Currently, Customs and the Federal Police undertake the seizure of wildlife and wildlife products under the EPBC Act.

In summary, Environment Australia recognises clear benefits in continuing to work closely with the Australian Quarantine Inspection Service (AQIS), particularly on the following issues:

- Joint Commonwealth procedures for regulating live imports;
- Risk analysis for new species proposed for live import;
- Border controls on the import and export of wildlife and wildlife products; and
- Management of illegally imported specimens.

## **IDENTIFICATION AND MANAGEMENT OF RISKS TO AUSTRALIA FROM THE ACCIDENTAL INTRODUCTION OF MARINE PESTS**

These comments address the identification and management of risks in relation to the accidental introduction of marine pests and pathogens to Australian waters through shipping. Introduced marine pests (IMP), including pathogens are introduced through ballast water and biofouling of vessels hulls, sea chests, internal water systems and equipment such as anchor chains.

The most common modes of marine pest introduction are, historically, hull fouling and accidental releases associated with mariculture, followed by ballast water, dry ballast and intentional releases. According to Hewitt et al (1999), ballast water accounts for only 15-20 per cent of the invasive marine species found in Australia, but it is becoming the major threatening vector over the last two decades. Hull fouling may account for up to 60 per cent of past IMP introductions to Australia.

Among the shipping-related vectors for IMP introduction, only ballast water is subject to national regulation; under the *Quarantine Act 1908*. Development of the quarantine function in relation to ballast water has resulted in the operation of voluntary guidelines for ballast water management since 1990, and the introduction of mandatory reporting and management requirements for international ship arrivals since 1 July 2001. A decision support system is now used to assess each ballast water tank of a vessel as "high risk" or "low risk". High risk ballast water must be managed to the satisfaction of AQIS. It may not be discharged in Australian territorial waters, leaving international vessels the option of exchanging it at sea prior to arrival outside the 12 nautical mile limit. On-board treatment of ballast water that is equivalent to exchange at sea outside the 12 nautical mile limit (for example heating or chemical treatment) is considered by AQIS on a case-by-case basis.

As noted, there is no national system of border protection from organisms that foul hulls and other shipping and boating equipment. The Northern Territory Government operates inspection protocols for visiting international vessels to minimise the risk from those vessels, and protocols are operating for the inspection of suspected illegal fishing vessels and suspected illegal immigration vessels seized by Commonwealth Authorities including the Australian Fisheries Management Authority, the Department of Immigration and Multicultural and Indigenous Affairs and the Australian Customs Service. A protocol for seized vessels brought into Western Australian waters has also been developed.

### **Risks to Australia**

Estimates of the number of introduced marine species in Australian waters range between 250 and 400, and a rule of thumb suggests that one in every six has or will become a pest.

The effects of IMP can be damaging to Australia from a range of perspectives:

- environment - through displacement of native species and sometimes takeover of native habitats, for example in Port Phillip Bay where the exotic seastar *Asterias amurnesis* dominates the biomass of the Bay;
- aquaculture – overstocking is required to compensate for losses due to exotic pests, up to 10 per cent of total stock in some cases;
- fishing - unquantified, but the introduction of pathogens has destroyed fisheries in other parts of the World; and

- shipping and ports - fouling organisms can impose significant economic costs through reducing vessels' efficiency of movement, and cleaning costs for vessels and port facilities.

At present an evaluation of the costs of IMP introductions has not occurred, although an analysis is under way by the Commonwealth Department of Agriculture, Fisheries and Forestry - Australia. The Northern Territory Department of Primary Industries and Fisheries considers that its \$300,000 pa Aquatic Pest Management Program instituted in 1999 provides effective insurance against the outbreak of an exotic species in Darwin's marinas, such as the black striped mussel which invaded three marinas in 1999 and cost at least \$2.2m to eradicate. Estimates provided by the DPIF indicate that, potentially, an IMP incursion in the Northern Territory could damage the pearling industry worth \$50m pa in the Territory, or the \$120m pa northern prawn trawl fishery. Through its Aquatic Pest Management Program, other fisheries, shipping, aquaculture, fishing and tourism are also protected in a cost-effective way.

It is becoming increasingly evident that the application of measures to minimize incursions is proving to be a highly cost effective means of reducing the risk of IMP impacting on Australia's industries and environment.

### **Reform Process for Introduced Marine Pest Prevention and Management**

*Australia's Oceans Policy* in December 1998 committed the Government to a range of actions in relation to the prevention of marine pest incursions, and the management of those that occur. In December 1999 this approach was clarified through the report of the National Taskforce on the Prevention and Management Marine Pest Incursions. The Taskforce recommended that a National System for the Prevention and Management of Introduced Marine Pests should be established, including the following components:

- **prevention** systems operating at the **pre-border, border and post-border** levels to reduce the risk of importation and translocation of IMP covering all vectors and sources;
- coordinated **emergency response** to new incursions and translocations;
- ongoing **control** of IMP already in Australia;
- **monitoring** to assist in risk assessment, detection of new incursions or spread of existing IMP, and control programs;
- **targeted research** to underpin policy and management initiatives;
- a **community preparedness** program to ensure public participation in and support for the National System;
- **education and training** to support operation of the National System;
- a **clear division of responsibilities** between governments, agencies and stakeholders involved in IMP management;
- explicit agreement on the **statutory framework** which will be used to enable action under the System's components and to regulate all relevant sectors; and
- **secure funding arrangements** for each element of the National System, including contributions from relevant private sector beneficiaries and potential polluters.

In relation to prevention the taskforce recommended that “AQIS continue to take the lead agency role to develop and manage a single national management regime for preventing the introduction and translocation of IMP from vessels in Australian Waters...”. At that time, it was expected by industry and State /Territory stakeholders that a single regime would be introduced expeditiously for management of ballast water arriving from international sources, as well as ballast water transported between Australian destinations. National management of other shipping related vectors was expected to follow the establishment of the single ballast water regime.

The National Introduced Marine Pests Co-ordination Group (NIMPCG), established in October 2000, is charged with carrying forward the recommendations of the National Taskforce. Developments to date include the introduction of mandatory ballast water management requirements for international vessels from July 2001 (referred to above) and the ongoing trial of administrative arrangements for a single ballast water regime at the Port of Hastings, being conducted by the Victorian Environment Protection Agency, AQIS and other partners including the shipping industry. No agreement has yet been reached among Commonwealth agencies, the States and NT, and the shipping and ports industries, on the form a single ballast water regime, or a regime for regulating other shipping related vectors, should take.

Consideration of preventative regulation systems for hull fouling is at a preliminary stage, with legislative options being evaluated. Several projects have been commissioned to review knowledge on hull fouling as a pest vector, with the aim of eventually incorporating hull-fouling risks into a decision support system for distinguishing high risk from low risk vessels (similar to the Australian Ballast Water Decision Support System now operated by AQIS).

### **Role of AQIS in Marine Pest Prevention Reform**

The appropriate role for AQIS in a national regime for managing the prevention of IMP transmitted by all shipping-related vectors should be based on an assessment of the adequacy of the various legislative options available to establish the regime. Discussions within the NIMPCG indicate that this should be based on the capacity to deliver a regime that provides:

- an appropriate level of protection from IMP transmitted by all vectors operating through all vessels including, for example, recreational and fishing vessels, as well as international trading vessels in Australian waters;
- an appropriate level of protection for environmental systems and human health as well as for production systems such as aquaculture and fishing;
- a single point of contact for vessels, that is efficient and transparent in terms of its dealing with industry and other stakeholders; and
- national consistency.

Currently, an examination by NIMPCG of the legislative options is under way. General considerations at this point appear to be that:

- a single management regime covering ballast water is likely to be feasible;
- State and Territory legislation that may be relevant would not cope well with the demands of an overall vessel monitoring and management system;
- the *Quarantine Act 1908* is currently limited in application to vessels arriving in Australia on international voyages; and

- the *Quarantine Act 1908* does not at present allow for the regulation of the entry of biofouling pests, thus a means would need to be found, through Commonwealth and State/Territory legislation, to regulate these pests.

It is therefore likely that a single management regime for all vectors will need to rely on a combination of State/Territory legislation and Commonwealth legislation, including the *Quarantine Act 1908*. There are a number of organisational models that may be considered in implementing the regime, including:

- a nationally agreed set of protocols between Commonwealth and State/NT agencies, combined with fee-for-service arrangements; and
- a single national authority deriving its powers from both Commonwealth and State/Territory jurisdictions.

Currently the application of resources to meet the risks to the Australian marine environment and marine industries posed by IMP is not commensurate with the size of those risks. A single regime to manage ballast water carried by both international and domestic shipping, as well other shipping related vectors which introduce IMP and translocate them within Australia, is needed to provide an appropriate level of required protection.

Environment Australia recommends that, consistent with the current direction of national reform of IMP prevention and management:

- the Commonwealth, States, Northern Territory, and industry and community stakeholders continue to work, through the National Introduced Marine Pests Coordination Group, towards developing a model for a single regime for managing the risks posed by entry to Australia of marine pests transmitted through shipping using Commonwealth and State/Territory legislation as appropriate; and
- the powers of the *Quarantine Act 1908* should be used where appropriate in the establishment of a single regime for managing the risks posed by marine pests transmitted through shipping.

## References

Hewitt, C L, Campbell, M L, Thresher, R E, Martin R B (eds) (1999) *Marine Biological Invasions of Port Phillip Bay, Victoria* ; CSIRO Marine Research - Centre for Research on Introduced Marine Pests, Hobart.

Joint Standing Committee on Conservation (SCC) / Standing Committee on Fisheries and Aquaculture (SCFA) National Taskforce on the Prevention and Management of Marine Pest Incursions (1999), *Report of the National Taskforce on the Prevention and Management of Marine Pest Incursions*; Environment Australia /Agriculture Fisheries and Forestry Australia, Canberra.