



Australian Government

Department of Agriculture, Fisheries and Forestry
Biosecurity

SUPPLEMENTARY SUBMISSION NO. 24.1
Inquiry into the Role of Science
for Fisheries and Aquaculture

Mr David Brunoro
Committee Secretary
House of Representatives Standing Committee on Agriculture, Resources, Fisheries and Forestry
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Via email: arff.reps@aph.gov.au

Dear Mr Brunoro

INQUIRY INTO THE ROLE OF SCIENCE FOR FISHERIES AND AQUACULTURE – RESPONSES TO
QUESTIONS ON NOTICE

Thank you for your letter of 6 June 2012 to Mr Ian Thompson, First Assistant Secretary of this department's Sustainable Resource Management Division, about questions on notice arising from the Inquiry's public hearing in Canberra on 30 May 2012. Mr Thompson has asked me to reply on his behalf.

The department's responses to the Inquiry's three questions, as set out in your letter, are provided in the attachment.

Yours sincerely

DR ANDREW CUPIT
Assistant Secretary
Animal Biosecurity

14 June 2012

ATTACHMENT

1. *Further information relating to requirements of interstate and cross-border movements of farmed fish species, in particular the types of applicable restrictions*

Interstate movements of farmed fish species are determined by the receiving state. The receiving state will determine the level of risk from farmed species according to a range of factors including:

- Whether the species in question is native and of significance in the receiving state
- The end purpose of the traded fish species
- The method of farming used in the recipient state
- The disease status of the source stock and the receiving state
- Potential significance in terms of genetic diversity, invasiveness etc

Each state has its own requirements. Some examples of arrangements include:

- Queensland, New South Wales and Victoria have agreed on policy 'Harmonising Native Fish Health Management and Screening within and between Victoria, New South Wales and Queensland'.
- South Australia requires certification of freedom from viral encephalopathy and retinopathy according to specified criteria for import of barramundi for farming in closed systems.
- South Australia assesses requests for interstate movement of stock according to their livestock notice (*Livestock (Restrictions on Entry of Aquaculture Stock) Notice 2008*) which species conditions.
- New South Wales requires health certification for some species imported from interstate including oysters and abalone.
- In New South Wales oysters from the Georges River are only sold within the Sydney catchment and all equipment from the area is restricted to that area to reduce risk of spread of Pacific Oyster mortality syndrome in NSW and further afield.
- Queensland has protocols for movement of penaeid prawn broodstock from Northern Territory and Gulf of Carpentaria waters to east coast situations.

In general, where a certain defined disease risk exists restrictions are put on cross-border movements of those species which include health certification to specific standards. Measures put in place are based on scientific data and knowledge and scientific risk assessment.

Another important consideration is risk associated with genetic diversity. There are many genetically distinct populations of species around Australia (e.g. barramundi, king prawns). While this offers opportunities for selective breeding and hybridising for aquaculture, it also may create problems in local wild populations. Much of the regulation regarding movement of stocks takes this issue into account, and while most aquaculture facilities are intended to be secure, escapes do occur. There same issues apply when these organisms are released into the wild, for example when hatchery produced fish are released for fish stocking. Hatchery fish often have much lower genetic diversity than their wild counterparts.

The science behind restricting movement of animals from one place to another is based on current knowledge. Within Australia a risk management approach is required which uses science-based evidence to assist in risk determination. Accurate knowledge of stocks, biology,

pathogens, effective diagnostics, geneticists, and epidemiologists, are some of the scientific resources used to assess risk to state resources.

Most jurisdictions have their own translocation policy pertaining to the movement of live aquatic organisms, some of these policies can be found here:

http://adl.brs.gov.au/brsShop/data/12105_translocation.pdf

<http://www.dpi.vic.gov.au/fisheries/about-fisheries/Moving-and-stocking-live-aquatic-organisms/guidelines-for-assessing-translocations>

http://www.daff.qld.gov.au/documents/Fisheries_Aquaculture/Translocation-Policy.pdf

http://www.pir.sa.gov.au/data/assets/pdf_file/0004/33736/translocation_report.pdf

2. *The frequency and scope of testing for the food safety of imported seafood*

Foods imported into Australia are subject to requirements under the *Quarantine Act 1908* to address quarantine concerns and the *Imported Food Control Act 1992* to monitor importers' compliance with sourcing food that meets Australia's food standards. Both acts are administered by the Department of Agriculture, Fisheries and Forestry (DAFF). Quarantine requirements must first be met before food standards are considered.

To monitor importers' compliance with Australia's food standards, DAFF operates a risk based border inspection scheme. During an imported food inspection, samples of the food are generally taken for analysis and a visual assessment is conducted, including an assessment of the labelling.

Food Standards Australia New Zealand (FSANZ) undertakes risk assessments of imported foods and advises DAFF when foods contain hazards that pose a medium to high risk to public health and safety. Such foods are categorised as 'risk' category foods under the Imported Food Inspection Scheme.

Risk categorised foods are known to contain particular food safety hazards which can cause serious food poisoning of consumers, regardless of the country of origin of the food. These foods are held until results of testing for the specific microbial or chemical hazards identified to DAFF by FSANZ are known.

Risk foods are initially inspected at the rate of 100 per cent of consignments, reducing over time with good compliance to the minimum inspection rate permitted under the *Imported Food Control Regulations* of five per cent of consignments. If a consignment fails inspection, future consignments are referred at the rate of 100 per cent until a history of compliance is again established.

All other foods are classified as surveillance category food as FSANZ has not identified any medium to high food safety risk with these products. In recognition of its low food safety risk, this category of food is inspected at the initial rate of five per cent of consignments, to monitor importer compliance with sourcing food that complies with Australia's food standards.

Surveillance category foods, due to their low risk to human health and safety, may be released from DAFF control prior to test results being confirmed. The inspection rate of any food that fails testing increases to 100 per cent of consignments, which is maintained until a history of

compliance is established. This is usually taken to be five consecutive consignments pass testing.

For surveillance category food, in addition to the increased inspection rate of 100 per cent of consignments following a failure, future consignments come under a test and hold process until a history of compliance is demonstrated.

Where a surveillance food fails testing and has been released, for example, contains a residue higher than the permitted level, the relevant state or territory authority is advised of the non-compliance so that they may take action if they determine the non compliance is of concern.

State and territory food regulatory agencies are responsible for ensuring that all food available for sale within their jurisdiction, both imported and domestically produced food, meets the requirements of Australia's food standards.

Consignments of imported seafood products are initially referred for inspection at either the 'risk' rate of 100 per cent of consignments, or the surveillance rate of five per cent. This depends on the species of imported seafood, its level of processing (fresh, cooked, cured, canned) and whether the goods are wild-caught or farmed.

Risk category seafood are tuna, mackerel, bivalve molluscs, ready to eat crustaceans and ready to eat processed finfish. Table 1 shows the tests applied to each type of risk seafood. Table 2 shows the tests applied to all other seafood.

A six monthly summary of imported food test results is published every six months, and details of foods that fail testing are published monthly. These reports are available at: <http://www.daff.gov.au/aqis/import/food/inspection-data>.

Table 1: Risk tests applied to seafood

Commodity	Test
Cooked crustacea (prawns, lobster etc)	coagulase positive <i>Staphylococci</i> , <i>Salmonella</i> , <i>Vibrio cholerae</i> (prawns only), standard plate count
Tuna and mackerel	histamine
Ready to eat fish (smoked salmon etc)	<i>Listeria monocytogenes</i>
Bivalve molluscs (oysters, mussels, clams, cockles)	<i>E. coli</i> , standard plate count, paralytic shellfish poisoning, domoic acid, <i>Listeria monocytogenes</i> (further processed ready to eat product only)
Marinara mix	coagulase positive <i>Staphylococci</i> , <i>E. coli</i> , <i>Salmonella</i> , standard plate count, paralytic shellfish poisoning and domoic acid

Table 2: Surveillance tests applied to seafood

Commodity	Test
Fish (other not listed above)	histamine
Fish (unless wildcaught)	fluoroquinolones, malachite green
Crustacea (unless wildcaught)	fluoroquinolones, nitrofurans
Raw crustaceans	sulphur dioxide

3. *Progress towards a cost-sharing / levy arrangement to deal with outbreaks of disease in aquaculture operations*

Governments and aquatic animal industry stakeholders have recognised the importance of developing formal arrangements between governments and private sectors on responses to emergency aquatic animal disease incidents. Many components of emergency disease response arrangements are in place for the aquatic sector (e.g. the Aquatic CCEAD¹, AQUAVETPLAN²); however, an overarching arrangement for government and industry cooperation in respect of emergency aquatic animal disease responses has not been developed. Without such a framework (e.g. an agreement similar to the terrestrial EADRA³) there is no assurance that emergency aquatic animal disease responses will be conducted to serve common national interests, rather than local or sector-based interests.

Some previous attempts to establish an emergency aquatic response agreement had centred predominantly on cost-sharing, particularly as it applies to the terrestrial EADRA. Those approaches failed to build momentum toward establishing an agreement because elements of the terrestrial EADRA were not attractive to aquatic industries and consensus on a way forward could not be achieved across a range of parties including the aquaculture and capture fisheries sectors.

Following the emergence of abalone viral ganglioneuritis in wild abalone populations in Victoria, the former Aquatic Animal Health Committee established a group with industry and government representation to *“Determine how national arrangements for managing emergency aquatic animal disease incidents could be improved through the development of a set of emergency aquatic animal disease response arrangements (that could form the basis of an agreement) between aquatic industries (including aquaculture and fisheries) and governments (including public good and environmental components) using the abalone industry as model.* Working group members were from the Australian Government (DAFF), governments of states with abalone industries, and from the abalone industry sectors (including abalone fisheries and abalone aquaculture).

The working group’s approach included:

- a) examining the benefits that could arise from establishing emergency aquatic animal disease response arrangements
- b) determining the elements that should be included in a set of emergency aquatic animal disease response arrangements
- c) determining a set of principles that recognise the unique characteristics and circumstances of aquatic industries and which appropriately underpin a set of emergency aquatic animal disease response arrangements
- d) considering possible approaches to a set of arrangements that could successfully apply to abalone industries and, by drawing on the precedents of existing deeds and agreements, develop a model that could suitably apply.

¹ The Aquatic Consultative Committee for Emergency Animal Diseases—responsible for coordinating the national technical response to aquatic animal health emergencies

² The Australian Aquatic Veterinary Emergency Plan—Australia’s contingency planning framework for emergency aquatic animal disease incidents

³ Emergency Animal Disease Response Agreement

The working group has completed its tasks and its report was provided to the Animal Health Committee for consideration. The working group identified a number of issues that would need to be addressed prior to the establishment of any industry–government agreement for aquatic animal disease responses. Some of these issues are unique to aquatic industries—for example shared resources and environments are a feature, and industries are often epidemiologically linked through shared water bodies resulting in shared disease risk.

A work plan has been developed that aims to engage aquatic industries and governments in seeking solutions to some of the unique circumstances of aquatic industries, including flows of risk and benefit that differ from terrestrial animal and plant industries.

Animal Health Committee has requested that aquatic animal industries be consulted more broadly (i.e. beyond the abalone industries) to seek their support (including financial support) for the suggested work plan. A meeting of fisheries and aquaculture industry representatives will be held in July 2012. The meeting aims to:

- a) cultivate a better understanding by both industry and government participants of the applicability, limitations, and advantages of biosecurity emergency response arrangements
- b) develop a path towards developing appropriate response arrangements which would include submission of an agreed work plan for consideration by governments.