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Ms M Kerley Secretary Joint Committee of Public Accounts and Audit Parliament House CANBERRA ACT 2601

Dear Ms Kerley

REVIEW OF AUSTRALIA'S QUARANTINE FUNCTION

I refer to your letters of 16 August and 5 September 2002 to the Secretary of the Department of Agriculture, Fisheries and Forestry regarding further information required by the Committee and the final Hearing of the Committee on 20 September 2002.

In relation to the letter of 16 August 2002, the Committee requested responses to eighteen questions seeking additional information. These responses are attached.

In addition, we have taken the opportunity to provide supplementary information to the Committee on other matters that have emerged during the course of the Committee's inquiry. These cover issues that might benefit from further advice or clarification. This supplementary information is also attached and covers the following areas:

- sea cargo operations
- passenger processing at airports
- emergency technical support
- clearance of imported vaccines
- processing illegal entry vessels
- alleged inconsistencies in container processing
- operational science support for Tasmania
- screw worm fly issues
- NAQS agreements in Queensland and
- copy of presentation provided to the Committee in the Torres Strait

The Department looks forward to assisting the Committee at the Hearing on 20 September 2002. Details of officers attending this Hearing will be provided separately to you.

Yours sincerely

John Cahill Executive Manager Quarantine

16 September 2002 Atts.

JCPAA question 1

The border function within AFFA comprises three outputs:

- A What is the level of movement of staff between these outputs?
- B What level of information sharing is there between these groups?
- C If AQIS were excised from AFFA and incorporated into a single Border protection agency how would this impact other AFFA operations?

Quarantine function within affa

Question 1A – Staff movements between three outputs

The <u>quarantine</u> function within AFFA comprises three outputs. From October 2000, when these outputs reflected their current form, the following staff movements have been recorded for periods of three months or more. These movements have mostly involved staff located in Canberra.

Staff Movements Recorded since October 2000

Current Staff (FTEs)#	Staff Moving To:	From AQIS	From PIAPH	From MAB	Total Moving To
365*	AQIS	na	4	17	21
119	PIAPH	12	na	8	20
112	MAB	17	8	na	25
	Total From	29	12	25	66

At March 2002 (see Attachment 3 of AFFA Submission to JCPAA).

Canberra staff only

na not applicable

Question 1B – Information Sharing between Business Groups

Interaction among AQIS, Biosecurity Australia and PIAPH is extensive at the formal level, informally and in relation to specific work projects. Information sharing is therefore extensive and constant.

Question 1C – Excision of AQIS Border Operations

A broad variety of models for any excision of border operations from AQIS are conceivable. The impact on AFFA operations of such an excision would therefore depend on the model proposed.

If it is assumed that the boundaries of any excision relate to the border control functions for importations into Australia and for passenger arrivals, the impact on AFFA operations could include:

- dislocation of current alignment between quarantine policy and operations;
- loss of responsibility and accountability to relevant Ministers;
- more complex administrative environment;
- a breakdown in the elements of the quarantine continuum (pre-border, border, and post border);
- less responsiveness to changes in the pest and disease status of other countries;
- less focus on the management of quarantine risks generally and specialist quarantine resources to manage these risks compared with the performance of other community protection activities;
- loss of efficiencies from staff presently required to undertake both import and export certification functions, especially in smaller locations; and
- higher costs.

JCPAA question 2

The Committee has observed the various AQIS operations during its inspection visits, for example at airports, at the docks, at the mail exchange.

- what flexibility is there for officers to be moved between particular operations to meet emerging risks?

flexibility to move quarantine offficers to meet emerging risks

There are two kinds of flexibility required to move resources including quarantine officers to meet emerging risks: the training/capacity of quarantine officers themselves to undertake a wide range of quarantine tasks; and the capacity of AQIS to recognise and respond quickly by moving resources including quarantine officers to meet emerging risks.

Flexibility of Staff

Since the early 1990's AQIS has implemented a multi-skilling policy of training inspection staff in the full range of quarantine inspection tasks and some export tasks. This training is fully accredited and involves both on and off the job training and verification of the required skills. Part-time staff at airports have generally been engaged and trained to fully equip them to undertake airport duties.

At all smaller AQIS work locations, AQIS inspection staff regularly undertake a range of quarantine and export duties within the working day, the working week, and to meet seasonal or other workload peaks. In Sydney, Brisbane and Melbourne staff rotation between the full range of quarantine tasks is actively cultivated.

The substantial numbers of new full time Quarantine Officers recruited during the past year have not only received basic training for their initial quarantine tasks but have already begun further accredited training across the wider range of AQIS responsibilities. Successful completion of this training will support applications for promotion to the next level within AQIS. Most will have completed that training by mid 2004.

In summary there is considerable flexibility for AQIS staff to move between particular operations to meet emerging risks with immediate and effective performance.

AFFA response to Jcpaa questions

JCPAA question 3

During the hearing of 16 July, AFFA witnesses noted that New Zealand was a country with a similar quarantine system to Australia.

• What is the level of information sharing between Australia and New Zealand quarantine functions, eg intelligence about potential quarantine threats, quarantine measures?

QUARANTINE INFORMATION SHARING WITH NEW ZEALAND

Sharing of information relating to quarantine issues between Australia and New Zealand occurs at many levels.

For example, the Primary Industries Ministers' Council includes New Zealand and was established to develop and promote sustainable, innovative and profitable agriculture, fisheries/aquaculture, food and forestry industries.

The 1988 protocol to Australia New Zealand Closer Economic Relations Trade Agreement on quarantine matters aimed to minimise restrictions on trans-Tasman trade, whilst ensuring that measures necessary to protect animal and plant health were maintained. Since 1988, Australia and New Zealand quarantine and biosecurity authorities have met regularly to discuss bilateral and multilateral quarantine matters. A number of specific access issues have been resolved over this period and some others remain under active consideration. In view of the importance of enhancing opportunities for trans-Tasman trade while maintaining the biosecurity of both countries, Australia and New Zealand agreed in 1999 to strengthen dialogue on quarantine/biosecurity. As a result, a steering committee, the Consultative Group on Biosecurity Cooperation (CGBC), which focuses on quarantine and biosecurity policies and the principles underlying the technical issues, has met almost annually since September 1999 with the last meeting being held on 3 April 2002.

The key areas where both countries agreed to strengthen their ties on biosecurity issues were:

- examination of the procedures of NZMAF and AFFA for establishing and implementing biosecurity requirements, particularly their respective approaches to risk analysis;
- ensure that current biosecurity requirements affecting trans-Tasman trade are based on sound science; and
- review the mechanisms for information exchange and other interaction between the two countries on biosecurity issues.

Four technical working groups (animal health, plant health, border operations and risk analysis) have been established under the CGBC and these all are working on issues of importance to bilateral trade between Australia and New Zealand and to international trade, including the setting of international health standards.

The CGBC's Animal Health and Plant Health Working Groups ensure the continuous exchange of technical information and intelligence on technical matters and international developments as well as the development of joint submissions to international technical fora. The CGBC Risk Analysis Working Group focuses on the framework for import risk analysis and consultative arrangements.

An AQIS/NZMAF Operational Liaison Forum was established in 1998 with the intention of facilitating border related operational liaison and harmonisation between the two organisations. In early 2000 it was decided that the forum should be placed under the auspices of the CGBC as a working group and be renamed CGBC Operations Working Group (OWG). The OWG has met twice each year with the last meeting being held in Australia from 14 to 17 May 2002. Under its Terms of Reference the OWG focuses on operational matters associated with border related biosecurity activities in Australia and New Zealand to examine, review and report on biosecurity procedures, processes and technologies used in either country. Information is freely exchanged between the parties, but at the same time any

confidentiality or intellectual property ownership requirements that may exist are also recognised.

At the informal and semi-formal levels there is ongoing contact on issues of mutual concern at officer level. This has included NZMAF involvement in this year's AQIS Risk Management Workshop and ongoing exchanges of intelligence information on compliance investigations where either side becomes aware of attempts to circumvent each other's quarantine arrangements. Additionally, officers visit each other's countries when required to progress issues arising out of the OWG processes such as inspection visits to verify harmonisation of quarantine standards.

AFFA response to jcpaa questions

JCPAA question 4

There have been calls for a more quantitative definition of Australia's ALOP.

• Would you discuss the risks and benefits of Australia adopting a more quantitative ALOP?

QUANTIFICATION OF AUSTRALIA'S ALOP

Australia's Appropriate Level of Protection (ALOP) reflects government policy that is affected by community expectations; it is a societal value judgement to which AFFA contributes by providing technical information and advice. The ALOP has been qualitatively defined in Biosecurity Australia's *Draft Guidelines for Import Risk Analysis* (2001, available on AFFA website) in terms of the acceptance by Australia of "very low risk".

It is important to note that the *SPS Agreement* does not require a Member to have a scientific basis for its ALOP determination. It is essentially up to each country to judge the level of quarantine risk it is prepared to accept. However, members must ensure that risk mitigation practices that are identified and implemented to achieve their ALOP minimise any negative effects on trade and are applied consistently across different situations.

A number of stakeholders have claimed that a more precise definition of ALOP is needed and should be attempted. AFFA does not share this view. Nor does the Primary Industries Ministerial Council (PIMC), which has agreed that such work should not be afforded priority. No other country provides a more precise definition of its ALOP than does Australia.

The Communiqué by the Primary Industries Ministerial Council in May, 2002 contains current Government policy on ALOP, agreed between the Commonwealth and the States.

"The Council agreed that the current level of definition of Appropriate Level of Protection meets Australia's current needs. Council members from all Australian jurisdictions are committed to addressing differences in regional pest and disease status and risks through early and comprehensive cooperation as part of the import risk analysis process."

Defining ALOP in more quantitative terms could create significant difficulties in terms of having to publicly quantify, in a "one size fits all" way, the extent of expected damage Australia is prepared to carry in biological, economic or environmental terms. A specific quantitative value for the ALOP could well lead to inconclusive legal debates in Australia and in the WTO over scientific evidence pointing to quarantine measures resulting in risks being slightly greater or below the ALOP value. This would not only be limited to border measures, as SPS measures put in place by the States/Territories in governing trade in agricultural commodities within Australia are subject to the same requirement of consistency with the national ALOP.

JCPAA question 5

The Tasmanian Government has called for quarantine measures to take account of regional differences.

- Would you respond?

REGIONAL DIFFERENCES IN QUARANTINE

The issue of regional differences has long been recognised, and the Primary Industries Ministerial Council considered it in May 2002.

Reporting to the PIMC encompassed:

- Acknowledgment of regional differences in pest status and biosecurity risks
- Application of SPS measures in a manner consistent with the pest and disease risk of the region, variations being based on sound science
- Recognition of the impediments to imposing supervised movement controls in areas without natural barriers
- Commonwealth commitment to addressing regional differences in pest status and risk, and the consequent SPS measures as part of import risk analysis
- The importance of early and comprehensive input from the States/Territories in regional pest status and risk information in the IRA process
- Recognition that while States/Territories may sometimes differ on measures necessary to manage risk, responsibility ultimately lies with the Commonwealth, with a commitment to develop an improved approach to resolve any differences.

The PIMC resolution included:

- Noting of State/Territory commitment to address inter-state trade measure inconsistencies using the SPS Agreement as a benchmark,
- Noting of the agreed position of all jurisdictions on ALOP definition, recognition of regional differences in pest status, risk, and addressing them in IRAs through early and comprehensive cooperation,
- Agreement to SPS measures being consistent with the associated risk and pest status of the region, with any variations of import measures between regions or States having as their basis the scientific analysis of quarantine risk, supported by domestic movement controls,
- Agreement that supervised that supervised movement controls were valid for Tasmania and Western Australia but difficult for other areas, and
- Agreement to the commitment by the Commonwealth to address regional differences in pest status and risk (and consequent SPS measures) as part of import risk analysis.

The PIMC communiqué stated:

"Council members from all Australian jurisdictions are committed to addressing differences in regional pest and disease status and risks through early and comprehensive cooperation as part of the import risk analysis process."

AFFA is committed to implementing Government policy as expressed, including observation of our international obligations.

AFFA Response to jcpaa questions

JCPAA question 6

The submission from the Australian Banana Growers Council Inc made several comments about the conduct of the IRA process for the importation of bananas. The Council recommended that the IRA process should be given legislative backing and that determinations be subject to statutory judicial review.

- Would you respond?

LEGISLATION OF THE IRA PROCESS

IRA's are already conducted according to a clearly defined, transparent process and are subject to a considerable amount of review, including:

- early in the IRA appeal to the Deputy Secretary on priority, scope and membership of the team performing the IRA; and
- at the conclusion of the IRA appeal to an Import Risk Analysis Appeal Panel on process, and/or the omission of a significant body of scientific information in the final IRA report.

In addition, Administrative Decisions Judicial Review action is open to those wishing to challenge quarantine decisions taken as the result of an IRA.

The current (non-legislated) approach was developed with extensive input from stakeholders and has been proven and improved over a period of time. It has the following advantages:

- scientific focus;
- analysis and decision-making at arm's length from the political process;
- as open and transparent a process as anywhere in the world, and more open and transparent than most countries;
- consistency with international (WTO) obligations;
- provision for extensive input from stakeholders at all key stages of the IRA;
- efficiency and flexibility (eg emergency situations can be dealt with efficiently) to meet the needs of a wide variety of quarantine situations while maintaining fairness and transparency; and
- integration with the AQIS power under the Quarantine Act to issue permits, thus having a positive link to legislation.

Legislating the IRA process would present some substantial difficulties:

• greater time required to make amendments to process, and a less flexible process to adjust the process;

- possible compromise to Australia's capacity to carry out best practice legislation would necessitate locking in prescriptions for how import risk analyses will be conducted, including methodology. However, import risk analysis is an evolving science and there needs to be sufficient flexibility in the process for Australia to take on board and implement improvements quickly;
- more costly and time consuming administration;
- less flexibility in the administrative system itself and the possibility that processing of "simple" import proposals may be subject to unnecessarily lengthy and resource-intensive processes giving rise to controversy and delays in access to desired imports (eg new genetic material);
- the real possibility of extensive challenge and litigation; and
- relevant overseas countries would have the opportunity to seek review of controversial determinations in the Australian courts, as well as through WTO avenues.

JCPAA question number 7

The Fertiliser Industry Federation of Australia was critical of the lack of offshore clearance for fertiliser imports and cited the incident involving the Alkimos. FIFA argued that inspection of the Alkimos' cargo at the loading port would have resulted in a considerable saving to industry when the cargo was rejected.

- Would you respond to FIFA's comments made during the hearing?
- Would you discuss the risks and benefits of AQIS inspecting cargo at the overseas loading port?

AQIS Inspection of imported fertiliser

The importation of fertilizer to Australia represents a significant quarantine risk. This is because of the potential for contamination and as a vector for the entry of exotic pests and diseases through its direct application in agriculture. Importation requires a permit and a permit condition is zero contamination.

AQIS has worked closely with the fertilizer industry to develop arrangements to manage the risks associated with fertilizer imports. In 1999, discussions between AQIS and the Fertiliser Importers' Federation of Australia (FIFA) considered the feasibility of AQIS quarantine officers conducting inspections of fertiliser shipments in overseas ports to help reduce the risk of contaminated product arriving to Australia.

Under the arrangements proposed by FIFA, AQIS quarantine officers would be based overseas for extended periods. They would then inspect both the fertiliser itself, and the ships that transport the fertiliser for any items of quarantine concern that may contaminate the product during its voyage to Australia (eg grain, soil, exotic seeds). In instances when contaminants were found in the vessels or the fertiliser, AQIS officers would direct and oversee actions to remove the contaminants prior to the vessel's departure from the overseas port.

While FIFA offered that AQIS's direct costs would be met, the proposal involved high opportunity costs to AQIS that could not be satisfactorily met. These would arise from the regular absence of more qualified and experienced staff that would need to be used for such tasks, travelling and remaining overseas for extended periods to conduct offshore inspections.

It was also recognised that AQIS quarantine officers have no legislative authority to conduct overseas vessel inspections, or to direct vessel operators or fertiliser exporters to remove quarantine contaminants prior to leaving overseas ports. AQIS's authority to direct such actions under the provisions of the *Quarantine Act 1908* does not extend to locations outside the Commonwealth of Australia. This limitation of the proposed arrangements is particularly relevant considering that detection of ship-

borne contaminants have been found to be the primary reason for quarantine impediment of fertiliser imports to Australia.

The arrangements proposed would not have addressed the risk of contamination either en route or at other ports, or any contamination dislodged from vessel components/structure during the course of the journey. Offshore inspection therefore would not obviate the need for shipments to be inspected on arrival in Australia.

In view of the above, onshore inspection of bulk fertiliser has been considered the most efficient use of AQIS specialist resources and the most effective means of identifying all potential quarantine risks associated with this commodity. This also recognises that it is the industry's responsibility to ensure that the fertiliser and vessels are clean of quarantine contaminants before fertiliser is loaded.

AQIS's current onshore inspection regime provides for a reduced level of quarantine intervention on bulk fertiliser that is loaded in overseas ports or transported on vessels that have been assessed by AQIS as "low risk".

In relation to the MV Alkimos, a shipment of fertiliser originating from the USA entered Fremantle for a partial discharge prior to subsequently sailing to Adelaide. The shipment was found to be contaminated with exotic grain and AQIS implemented control strategies to ensure that no contaminated product was released into Australia.

In this case, the contamination appeared to be only present on the ship's structures indicating a high probability that the ship was contaminated prior to loading. Because of the contamination, the fertiliser was ordered into quarantine. While only minimal grain contamination was present on the surface of the fertiliser itself, the level of contamination on the structures of the ship's holds meant that it was not possible to unload the whole cargo without dislodging that grain and contaminating the fertiliser.

There are limited treatment options for fertilisers that are contaminated with grain, due to the large quantities of the product and the fact that some heat treatments actually reduce the available phosphate in the fertiliser, thus reducing its value.

AQIS had considered a range of options put by the importers to address the quarantine concerns associated with the shipment including the partial discharge of the fertiliser that was in the centre of the hold and not in contact with the hold structure itself (the area of contamination), screening of discharged fertiliser to remove the grain contaminants, and treatments such as processing. This allowed the safe clearance of some portion of the shipment in Fremantle from the top-middle of the hold. The vessel then sailed to Adelaide with the remainder of the consignment but by the time it arrived, the sides of the fertilizer had contaminated the centre and it could not be safely unloaded. The remainder of the consignment was subsequently re-exported on the Alkimos.

Although the importation on the MV Alkimos did not, on arrival in Australia, comply with a critical condition on the import permit (zero contamination), AQIS worked closely with the respective importer interests throughout the contamination incident process with a view to finding ways to effectively manage the quarantine risks associated with this shipment. This ultimately allowed partial unloading of the shipment and the re-export of the balance.

JCPAA question 8

The Industry Working Group on Quarantine (IWGQ) has noted that there are several arrangements where a number of States and Territory agencies are contracted to provide AQIS services. The IWGQ suggested that AQIS be responsible for all export and quarantine services

- Would you respond to this suggestion?

AQIS responsible for All export and quarantine services

Following consideration by Ministers and with the agreement of the States concerned, AQIS resumed direct responsibility for quarantine services in NSW, Qld, Vic, SA, ACT and all NAQS resources including those of NT and WA, over the period 1995 to 1997.

State/Territory agriculture departments in WA, NT and Tas continue to deliver Commonwealth services under specific agreements with AQIS with AQIS providing funding for all international quarantine activities. However, unlike in other jurisdictions, AQIS has no direct management responsibility for the delivery of international border control services in WA, NT and Tas.

AQIS undertook a benchmarking exercise with these three jurisdictions to ensure that service delivery costs were aligned. The three concerned advocated that the existing arrangements were beneficial because of the synergy of providing interstate and international quarantine functions simultaneously. These three areas have major differences in their pest and disease status compared with the rest of Australia and have strong interstate quarantine regimes.

While the present arrangements are working, there could be advantages in the Commonwealth now having full responsibility for service delivery as the most efficient and effective way of delivering national quarantine arrangements. This recognises:

- increased threats to quarantine integrity at the international border;
- the potential for reduced management effort and for reduced dependence on State hierarchies and public sector processes;
- a likely shortening of the chain of command;
- improved capacity for uniformity in service delivery; and
- greater flexibility in relation to full national service delivery responsibilities.

Importantly, the increased resources associated with the Government's increased quarantine intervention initiative have substantially altered the balance of State funded versus Commonwealth funded quarantine staff in WA and NT. The number of Commonwealth funded staff has now increased substantially since the decisions were originally made to retain State/Territory based border service delivery arrangements (approximately 100% and 50% respectively). The balance of State/Territory effort required to manage Commonwealth functions has therefore altered dramatically and much greater attention is now required on Commonwealth border functions compared with those of the State/Territory.

Ultimately this issue is a matter for the relevant Governments to address together although the Commonwealth is empowered to resume service delivery with appropriate notification.

JCPAA question 9

The Committee observed the external inspection of containers at the port of Sydney and the removal of soil and other material. The Committee notes the purpose was primarily to prevent the arrival of seeds.

• What procedures are in place to monitor the area for any exotic plants or to prevent the establishment of exotic plants at first call wharf areas?

Monitoring for exotic plants at wharf areas

AQIS currently conducts wharf surveillance patrols on a regular basis. First port of call wharf areas are constructed of bitumen and/or concrete and as such make plant establishment difficult. The AQIS wharf surveillance patrols report and contain any issues of quarantine concern. If unusual plants are detected the matter is referred to AQIS plant scientists for evaluation and advice on treatment options.

AFFA response to jcpaa questions

JCPAA question 10

The Committee observed the operations at the international mail centre and the use of the AQIS sniffer dog in various locations. It occurred to the Committee that an alternative to the dog would be to gamma radiate all or some of the international mail to destroy any quarantine items.

- would you discuss whether such a measure would be feasible in terms of cost/savings and effectiveness?
- what types of material is the quarantine dog trained to detect? How sensitive is the dog to these materials?

Irradiation of Mail

AQIS has investigated the possibility of irradiation of mail items as an alternative to screening and inspection. The technology is currently difficult and costly to implement within the mail centres.

To use the technology effectively the type of quarantine concern within the mail would have to be identified before being irradiated as different quarantine pests require a different dosage of irradiation. This is currently difficult as international mail often comes into the country without a full declaration of what is within the mail items. If mail is irradiated at high dosages it also has the potential in adversely effect other items within a parcel such as electronics, plastics, fabrics, glass, therapeutic drugs and seeds etc.

AQIS currently offers gamma irradiation as a treatment option for certain items of quarantine detected through the current screening process.

AQIS is continuing to monitor and view developments overseas for mail treatments as an alternative to existing screening arrangements.

Detector Dog target odours

Quarantine Detector Dogs are trained to detect:

- fresh fruit and vegetables;
- meat, both fresh and processed, including canned meats;
- plant material;
- eggs;
- birds;
- reptiles;
- bees;
- soil;
- seeds;
- cheese.

The dogs have extremely sensitive noses for odour detection, allowing them to alert to tiny items of quarantine concern that may not be distinguishable by x-ray. These include pressed flowers between book pages, seeds in letters and small quantities of soil particles. The dog teams are also an invaluable tool for alerting to items that are rigorously packaged to prevent detection, such as cryogenically packaged foodstuffs, which are still detectable by the dogs.

JCPAA question 11

The Committee observed the use of x-ray machines at the border.

• What types of material of quarantine interest are detected, and at what level of sensitivity?

X-Ray detections at the border

X-rays used for quarantine purposes at the border are capable of detecting the broad range of items of plant and animal origin, which present a quarantine risk.

Approximately 75% of all undeclared seizures at airports are detected through x-ray inspection. Recent seizures detected through the x-rays include live plant material, various food items, animal products such as raw meat and bee pollen, wooden articles, seeds and biological products.

X-rays are widely used at International Mail Centres and facilitate the detection of over 60% of all seizures. Seizure types are similar to those detected in Airports.

AQIS's Cargo clearance operations also use x-rays to screen HVLV (high volume, low value) air parcel consignments where serious seed contamination, birds eggs, bud-wood, meat, biologicals and soil contamination have been found in recent months.

As a result of the IQI arrangements, other border interceptions such as narcotics, guns, credit cards and passports have also been detected by AQIS at its various x-ray points.

JCPAA question 12

During the inspection visits the Committee noted the amount of seized material and waste which poses a quarantine risk. The treatment of waste was the subject of Submission 10 from Mr John Hall.

- Would you briefly discuss the various methods of waste disposal which are used and the rationale for each disposal method?
- Would you also discuss why other commonly used methods for waste disposal are not used?
- Would you respond to Mr Hall's proposal in his submission

Quarantine waste disposal arranghements

Methods and Rationale

AQIS has in place arrangements with private contractors to dispose of quarantine waste from vessels at seaports, galley waste from airports and dunnage and other waste from approved quarantine premises. Contractors processing quarantine waste from all sources, including material surrendered by or seized from passengers, are monitored by AQIS under co-regulation arrangements. This includes surveillance and formal audits.

Quarantine waste disposal methods currently approved by AQIS include deep burial, high temperature incineration and heat treatment by autoclaving. Before waste treatment methods are approved, Biosecurity Australia assesses the effectiveness of the proposed treatment.

Contractors to be employed by the relevant airport or seaport to dispose of quarantine waste must comply with relevant State and Commonwealth environmental legislation, which in some States, limits the treatment methods available, as well as satisfying AQIS that the disposal method will deal effectively with the quarantine risks posed by the waste. For example, State environmental agencies do not allow incineration and deep burial in some circumstances.

New quarantine waste treatment methods are therefore subject to a request for their use by a contractor and evaluation by BA before they are approved by AQIS

Why Other Methods Of Waste Disposal Are Not Used

The commercial efficiency of waste treatment processes are not assessed by AQIS as these are commercial matters. All currently approved waste treatment methods have been assessed as efficacious as a quarantine treatment by Biosecurity Australia and further supported by review from an independent consultant.

Response to Mr Hall's Submission

Primary issues raised by Mr Hall in relation to current quarantine waste disposal practices include:

• the current systems approved by AQIS are costly and inefficient

- AQIS should support the development of quarantine waste treatment facilities that destroy all pests and diseases before permitting disposal of the residual waste
- *deep burial is not capable of destroying all plant and animal pathogens that quarantine waste may contain*
- deep burying quarantine waste without prior treatment leaves open the possibility that pests or disease agents may persist underground for many years, creating problems latter if the ground is disturbed, or through leakage of material into waterways

The provision of waste management facilities is not part of AQIS's core business. AQIS therefore encourages private operators to supply quarantine waste management facilities. Decisions about their commercial viability are made by the supplier not AQIS. The cost and efficiency of private facilities are commercial matters between the supplier and purchaser of those services.

Deep burial is an internationally accepted method of disposing of animal and plant quarantine waste. The majority of organisms of quarantine concern do not survive for long periods of time in the anaerobic environment provided by deep burial. As the waste decomposes, soil microorganisms and changes to the chemical environment effectively destroy the viability of a wide range of bacteria and viruses. Seeds are also affected by changes to the chemical environment, decreasing their viability over time. This occurs in a controlled environment, buried under several metres of soil. Quarantine waste deep burial sites are tightly controlled by local council and State environmental legislation.

The issues raised by Mr Hall have been discussed with him. This discussion included advice that the concept he has outlined would need to be proposed by a commercial entity and that AQIS core business was not to develop waste treatments but rather to consider proposals that companies may submit to AQIS.

JCPAA question 13

During the inspection visits the Committee was informed of occasions where items posing a quarantine risk has been confiscated.

How does AQIS decide whether to initiate a prosecution or to 'counsel' an offender?

When mail items are detected with seizable items, what follow up steps are taken in relation to the sender of the mail and the receiver of the mail?

PROSECUTION OR COUNSELLING OFFENDERS including legislative authority

Where quarantine items are found, quarantine officers establish if an offence may have taken place and whether the offence warrants issuing:

- a verbal warning (Airports passengers only),
- a written warning,
- a Quarantine Infringement Notice (Airports passengers only), or
- proceeding with a view to prosecution.

Further consideration by quarantine officers include: did the passenger or consignee declare the goods; are the goods concealed with the intention of avoiding detection; the quantity and risk associated with the goods; language issues and extent of understanding by the passenger; duration of visit; as well as a range of other considerations relating to the seriousness of the matter and the likelihood of a successful prosecution. Experienced quarantine officers apply judgement to each case based on training, precedent cases and standard work instruction procedures applicable to each program within AQIS.

The above considerations are underpinned by an AQIS wide compliance and investigation program that employs a range of enforcement measures from advisory actions aimed at voluntary compliance through to criminal prosecutions.

The Quarantine Act 1908 has numerous offence provisions. However, most penalties imposed under the Act arise from a person committing one of two types of offences.

These offences are:

- (a) the illegal importation of goods in contravention of the Act under Section 67.
- (b) the infringement notice offence as set out in Regulation 59 of the Quarantine Regulations 2000 (Quarantine Infringement Notice).

The authority for the Commonwealth to prosecute is under Section 9 of the Director of Public Prosecution Act 1983. Further, prosecutions are conducted under the Prosecution Policy of the Commonwealth. AQIS conducts all prosecutions in accordance with this policy through the services of the Australian Government Solicitors Office (AGS) and the Director of Public Prosecutions (DPP).

Imposition of penalties in relation to Quarantine Infringement Notices (QIN's), is provided for under the Quarantine Regulations 2000, which are imposed on incoming passengers through International Airports. The Regulations allow for a maximum infringement penalty of \$220, unless the person elects to have the matter dealt with by a court. Where such an

election is made, the possible maximum penalty that may be imposed by the court arising from the same infringement is \$13,200 or 2 years imprisonment.

The Australian Customs Service (ACS) prosecutes quarantine offences on behalf of AQIS that are detected at International Airports (see briefing number 14). These offences are normally associated with higher quarantine risk material and where evidence of deliberate concealment can be adduced. These prosecutions are conducted by the AGS before a court of summary jurisdiction. Offences detected in other Border control areas such as International Mail, including post-border detections, are prosecuted by AQIS. These prosecutions are conducted by the DPP.

The current maximum penalty under Section 67 is 10 years imprisonment, which can be converted to a pecuniary penalty entailing possible fines of up to \$66,000 for an individual and \$330,000 for a body corporate. The recent amendment to Section 67 allows for a higher penalty if the illegal importation is commercially motivated. Where there is evidence of a commercially motivated illegal importation maximum penalties can be 10 years imprisonment and/or up to \$220,000 for an individual and for a body corporate \$1.1 million.

Where prosecution action is considered, a brief of evidence is compiled and assessed for sufficiency of relevant (prima facia) evidence in accordance with Commonwealth and AQIS Compliance and Investigation Program standards.

The Prosecution Policy of the Commonwealth is then considered to assist the referral to the Commonwealth Director of Public Prosecutions (CDPP) for appropriate action. The criteria governing the decision to forward a matter to the CDPP includes:

- the public interest in pursuing a prosecution (number of weighted factors)
- maintaining confidence of the community in the criminal justice system
- fairness and consistency
- the need to tailor general principles to individual cases
- the effective use of finite resources
- the availability of admissible, substantial and reliable evidence
- whether there is a reasonable prospect of conviction and the likely strength of the prosecution case (difficult to prove intent)
- the risk of prosecuting an innocent person.

In terms of 'counselling' an offender, the discretion is considered against the Prosecution Policy and generally, once the available evidence is assessed as prima facia, consideration is then given to either a Verbal Warning (Airports passengers only) or a Letter of Warning action.

In determining whether 'warning' action is appropriate consideration is given to factors such as severity, criminal intent, obscurity of legislation, strength of evidence and resource availability.

ACTIONS TAKEN WITH SENDER and RECEIVER OF SEIZED MAIL

When AQIS seizes an item from international mail, evidence of intent on the part of the consignee to circumvent quarantine is grounds for referring the matter to the AQIS Compliance and Investigation Program (see above for further information).

Where no evidence of deliberate wrongdoing on the part of the consignee exists, AQIS notifies (by mail) the consignee that an item has been seized and provides the consignee with options for addressing the quarantine risk (e.g. re-export, destruction, treatment).

The consignee is also sent an information pamphlet on quarantine that outlines what items should not be mailed to Australia and which refers people to the AQIS website for further information. The pamphlet also requests people to pass the information to friends and relatives overseas.

AQIS contacts the consignor of seized mail items directly where the consignor is an individual or company that has repeatedly sent prohibited material or where it is a company that has conducted a mail-out of prohibited material.

recent prosecution and quarantine infringement notice activity

Recent Prosecutions and Penalties Imposed For the financial year 2001/02 there has been a total of 221 airport border prosecutions before summary courts. Penalties ranged from \$400 to over \$10,000. In recent times fines have been toward the top end of the range. Unique to the airport environment, the person in possession of the goods at the time of detection of a possible offence, is responsible for their importation.

To secure a prosecution for goods detected at International Mail Centres and/or International Cargo Clearance, there is a requirement to prove intent by the identified recipient to import the prohibited goods. In most cases, evidence of intent is difficult to obtain either through direct admission by the recipient, or from the overseas addressors. These matters require a full investigation approach and are resolved through different levels of responses from Letters of Quarantine Warning to the intended recipient, to prosecution.

For the financial year 2001-02 a total of 435 investigations were conducted on quarantine detections referred . Most of these matters were resolved through Letters of Warning from either AQIS or Commonwealth DPP. There are currently 4 major investigations being conducted with a view to referral to the DPP for prosecution.

In relation to the recent commercially motivated illegal importation amendment to Section 67 which only became law in May 2002, there has not yet been any prosecution. Any future prosecution action will need to be determined by a superior court (to a summary court) if the maximum penalty is sought.

Quarantine Infringement Notice Activity For the financial year 2001/02 a total of 12,595 Quarantine Infringement Notices (QIN's) were issued at international airports at an average of 1,049 per month. Of the total number of QIN's issued for this period of time, 0.1% of persons so issued elected for the matter to be heard in court.

AFFA response to jcpaa questions

JCPAA question 14

The Committee understands that if a prosecution is to occur, AQIS refers the matter to Customs who undertake the prosecution. Why does this occur?

Referral of quarantine prosecutions to customs

AQIS can and does initiate prosecutions for breaches of the Quarantine Act on its own account, utilising the resources of the Australian Government Solicitor and the DPP. Typically such prosecutions might arise from commercially motivated importations, information that might be received by AQIS directly (eg. via the AQIS Redline toll free number), export issues, or other circumstances where evidence comes to light post border.

In addition to the circumstances set out above, Customs undertake prosecutions of passengers on behalf of AQIS at international airports because typically noncompliance by passengers with the Quarantine Act can also mean that there is also a breach of the Customs Act. For instance, the illegal importation of quarantineable material without an import permit is a breach under the Quarantine Act, while at the same time failing to declare quarantineable material on the passenger's incoming passenger card is also a breach of provisions in the Customs Act prohibiting false or misleading statements to a Commonwealth officer.

Separate but concurrent charges can therefore be pursued by both agencies with Customs managing the overall prosecution process with AQIS monitoring quarantine specific issues. Customs has formalised these arrangements (including AQIS's primary role on quarantine issues) via MoUs with Australian Government Solicitor (AGS) and the Commonwealth Director of Public Prosecutions (DPP).

At international mail centres, however, because of additional time available to process offending items before their collection by the addressee, AQIS and Customs officers make a case-by-case determination as to which legislation offences are more likely to succeed in the particular circumstances (see briefing number 13 for more information about international mail breaches of the Quarantine Act).

JCPAA question 15

The submission from Environment Australia referred to the National Introduced Marine Pests Co-ordination Group (NIMPCG) and the trial of administrative arrangements for a single ballast water regime at the Port of Hastings in Victoria.

- Are all ports equally at risk of ballast water pests? If not why are there differing risks?
- Would you discuss the outcomes to date of the NIMPCG initiative including the trial at the Port of Hastings?
- What is the level of monitoring for marine pests introduced via ballast water? Which agencies are responsible for the monitoring?

ballast water

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Are all ports equally at risk of ballast water pests? If not why are there differing risks?
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No, not all ports are equally at risk from ballast water pests. The marine organisms that are likely to be introduced via ballast water are varied, and as such require different environmental conditions to survive and flourish. The distribution of a pest species also varies throughout the world, thus the potential risk of ballast water depends on the source port as well as the environmental characteristics of the recipient port. The risk that a marine pest poses at a particular port also depends on the characteristics of the species (eg its tolerance to various environmental parameters may or may not allow the species to survive in the new environment).

For example a marine species known to exist in cold water areas would not be able to survive if introduced to a tropical port. Thus that particular species would present only a low risk to that port.

Would you discuss the outcomes to date of the NIMPCG initiative including the trial at the Port of Hastings?

The National Introduced Marine Pests Coordination Group (NIMPCG), which AFFA chairs, is a national consultative body of government, scientific, environmental and industry stakeholders. NIMPCG was established to work towards implementing the recommendations of the 1999 National Taskforce on the Prevention and Management of Marine Pest Incursions report. Specifically NIMPCG's tasks are to:

- 1. initiate immediate actions to establish a credible national emergency preparedness capability within current statutory arrangements, and to
- 2. develop options and implement a longer term *National System for the Prevention and Management of Introduced Marine Pests* (the *National System*)

There has been substantial progress in implementing the recommendations arising from the Taskforce's report. In summary, most of the recommendations relating to providing interim arrangements through the initial 2-year period have been essentially met or substantial progress has been made on them. Many of these actions will set the approach for the longer-term components of the *National System*.

Significantly, interim emergency preparedness and response arrangements are in place through the Consultative Committee on Introduced Marine Pest
 Emergencies (CCIMPE), and NIMPCG has agreed these should form the basis of longer-term arrangements for emergency preparedness arrangements.

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A number of the elements that will support the agreed national regime for preventing the introduction and translocation of pests from vessels have also been developed, commissioned or put in place. The support elements include an Australian ballast water decision support system (the DSS), a national marine pests data base (NIMPIS), the preliminary identification of Australian coastal contingency deballasting and ballast uptake zones and substantive research on identifying approaches to managing international and national ballast water and hull fouling risks.

NIMPCG has also developed the Australian Strategic Plan 2002-2006 to guide its work and provide a framework for developing the proposed policy document setting out all aspects of responsibilities for the *National System* and its components. This document is being submitted to the relevant Natural Resource Management Ministerial Council and Australian Transport Ministerial Council for adoption.

The Port of Hastings trial is being managed by the Victorian Environment Protection Authority (EPA) and is due for completion at the end of December 2002. This project has been established to trial an integrated system for the management of international and domestic ballast water. EPA have recently engaged a consultant to undertake an evaluation of the trial and it is anticipated that this review will be completed by the end of the year.

What is the level of monitoring for marine pests introduced via ballast water? Which agencies are responsible for the monitoring?

Port baseline surveys are being conducted at many of Australia's first ports of call. These surveys provide an indication of the extent of marine pest infestation in Australia. Port surveys are general surveys of port environments, they do not specifically monitor new introductions through ballast water or other vectors. NIMPCG is currently reviewing its policy on the required frequency of re-surveys and monitoring requirements in ports, which should be finalised by the end of 2002. AFFA, together with CSIRO-Centre for Research on Introduced Marine Pests (CRIMP), are currently responsible for managing Australia's Port Survey Program, and they report to NIMPCG and the Ballast Water Research Advisory Group (RAG).

JCPAA question 16

During the Brisbane hearing and subsequent inspection visits there was much discussion of the threats posed by biofouling organisms.

- How has this threat come about (in the past anti-fouling paints provided a solution)?
- What sort of vessels pose the greatest threat/the least threat and why?
- Would you discuss the impediments to determining which agency, State or Commonwealth should be responsible for addressing this threat?
- If one agency became responsible for addressing this threat, what infrastructure, organisational, and personnel arrangements would be needed, and what would be the cost (order of magnitude estimate only)?

managing the risks of marine pests

Background

In 1999 the National Taskforce on the Prevention and Management of Marine Pest Incursions proposed that a *National System for the Prevention and Management of Introduced Marine Pests (the National System)*, should be developed. The Taskforce envisaged a single, nationally consistent approach to managing the introduction and translocation of marine pests in Australia. All governments have agreed with this.

It was further agreed that the *National System* should incorporate a national regime to manage the risks posed by vessels. This was intended to be developed to prevent and manage marine pest incursions through international shipping at the border and their translocation post-border through domestic shipping.

The Taskforce report also identified a range of other vectors that should be addressed by the proposed *National System*, including fishing operations, recreational boating, mariculture operations, as well as the aquarium trade.

Responsibilities for these issues are shared between groups within the Commonwealth and with State/Territory agencies. Constitutionally, the Commonwealth has responsibility for providing quarantine barrier services for international shipping and trade and the States/Northern Territory (NT) have responsibility for inter and intra state shipping and trade.

Successive Commonwealth Ministers have written to their State and Territory government counterparts, committing the Commonwealth's support to developing a National System, in line with the Taskforces report. However this has been conditioned on the understanding that any arrangements maintained State/NT responsibility for coastal shipping; were cost neutral to the Commonwealth, and the States/NT would arrange the necessary delegation of powers through legislative amendment.

The Commonwealth responsibilities for marine pest issues rest with the Department of Agriculture, Fisheries and Forestry – Australia (AFFA), Environment Australia (EA) and the Department of Transport and Regional Services (DOTARS).

AFFA has responsibility for marine pest policy issues, including the co-ordination of work to progress the implementation of the recommendations of the National Taskforce and management of international ballast water and hull fouling organisms at the border. AFFA also provides the national co-ordination of emergency response arrangements for marine pest incursions through its role in chairing the Consultative Committee on Introduced Marine Pest Emergencies (CCIMPE).

EA has responsibility for marine pest issues in an environmental context at the Commonwealth level. Many of the organisms, which can be carried in ballast water or on ships hulls, are of environmental interest as they are exotic to Australia. They are not all necessarily of significance as pests or diseases. DOTARS represents shipping interests.

The National Introduced Marine Pests Coordination Group (NIMPCG), which AFFA chairs, is a national consultative body of government, scientific, environmental and industry stakeholders. NIMPCG was established to work towards implementing the recommendations of the Taskforce report. Specifically NIMPCG's tasks are to:

- 1. initiate immediate actions to establish a credible national emergency preparedness capability within current statutory arrangements, and to
- 2. develop options and implement a longer term National System for the Prevention and Management of Introduced Marine Pests (the National System)

Progress

There has been substantial progress in implementing the recommendations arising from the Taskforce's report. In summary, most of the recommendations relating to providing interim arrangements through the initial 2-year period have been essentially met or substantial progress has been made on them. Many of these actions will set the approach for the longer-term components of the *National System*.

- Significantly, interim emergency preparedness and response arrangements are in place through CCIMPE, and NIMPCG has agreed these should form the basis of longer-term arrangements for emergency preparedness arrangements.
- A number of the elements that will support the agreed national regime for preventing the introduction and translocation of pests from vessels have also been developed, commissioned or put in place. The support elements include an Australian ballast water decision support system (the DSS), a national marine pests data base (NIMPIS), the preliminary identification of Australian coastal contingency deballasting and ballast uptake zones and substantive research on identifying approaches to managing international and national ballast water and hull fouling risks.

NIMPCG has also developed the draft Australian Strategic Plan 2002-2006 to guide its work and provide a framework for developing the proposed policy document setting out all aspects of responsibilities for the *National System* and its components. This document is being submitted to the relevant Natural Resource Management Ministerial Council and Australian Transport Ministerial Council for adoption.

Issues to be addressed

While the Commonwealth has implemented mandatory ballast water management measures for international shipping, further work needs to be done to address the management of coastal ballast water and other vectors, such as hull-fouling, recreational boating, mariculture and such.

Efforts to address hull fouling present practical and operational challenges that have not yet been fully analysed on a national or international basis. There is currently no practical or cost-effective means of inspecting or treating the hulls of large commercial vessels. NIMPCG has established a working group to consider approaches to commercial hull-fouling issues, and asked it to report to its next meeting, scheduled for later this year.

Responsibility for domestic hull fouling issues rests with the States/NT – hull fouling is currently only regulated in very specific circumstances.

- in the NT illegal entry vessels (fishing and immigration) and some private yachts entering enclosed marinas are subject to inspection and management protocols administered under NT jurisdiction.
- in Western Australia some illegal entry vessels (fishing and immigration) are subject to inspection and management protocols administered under State jurisdiction, at Willie Creek.
- Queensland recently circulated a draft of a proposed State protocol for the management of illegal entry vessels.

In November 2001 NIMPCG tasked Queensland, the NT and Western Australia to develop consistent national protocols on inspecting and dealing with non-commercial vessels (and any vessels, including barges, coming in close contact with these vessels). This work has been delayed and those States/Territory have indicated they will report by December 2002.

Approaches to dealing with other vectors has not been addressed while the focus has remained on ballast water and hull-fouling.

The key gap in progress is a policy level agreement on what might constitute the components of a *National System* and how they should be implemented, managed and funded. Most work has focused on the ballast water component of the vessel regime, with little consideration of non-vessel elements. At this level there are two key areas that require further work in developing the envisaged *National System*:

- primarily, an agreement remains to be reached between the Commonwealth and the States/NT on the policy document that is to set out all aspects of responsibilities for the *National System* envisaged in the Taskforce Report; and
- secondly, no funding base has been identified for long-term support of the necessary infrastructure.

Delays in developing an agreed policy position on these two issues is consistent with the Taskforce report's proposed staged, stepwise approach to developing understandings of what the most appropriate approach would be by providing a two-year interim arrangements period.

This period was intended to allow negotiation and evaluation, as well as incorporation of increased knowledge and understanding from key analysis, research projects and experience in

implementing international ballast water arrangements and domestic ballast water arrangements, including the DSS.

To progress work AFFA and NIMPCG commissioned an independent legal report that provides options for the type of legislative framework to underpin the development of it. The report identified that the option of utilising Commonwealth legislation and administration for international ships and State/Territory legislation and administration for domestic vessels was legally acceptable and consistent with traditional constitutional understandings. It also reflects terrestrial animal and plant pest/health arrangements.

While the States/NT have expressed a strong desire for another option based on single Commonwealth legislation, AFFA believes such an approach is inconsistent with current understandings on Constitutional responsibilities and poses significant implementation problems. These would include liability and service delivery issues across the wide variety of vectors and regional/state incursion issues that might be involved.

To help progress these considerations AFFA has prepared a detailed summary of possible implementation options and related regulatory needs for the consideration and guidance of relevant Ministerial Council groups.

JCPAA question 17

During the inspection visits the Committee was briefed on several potential serious weed species, such as siam weed, spiked pepper, and yellow burrhead.

Is AFFA aware of any research into these and other quarantine threats which will enable a more effective response in the event of an incursion of these weeds? If so would you provide a brief overview of the research?

What scope is there for pre-emptive research into potential control measures for these species?

Exotic Weed response and preparedness

The weeds mentioned are just some of many that have recently been detected in Australia or could enter Australia in the future. It would be difficult and impractical to have detailed preemptive research on all targeted and non-targeted weed threats due to the potentially large number of weeds that could enter Australia or have become established in Australia at as of yet undetectable level, even taking into account pest targeting exercises.

For Siam weed the research has been extensive and because of the major status of the weed much was done prior to the detection in Australia. The research included studies on seed biology, susceptible to chemical and other control measures and climatic preferences. Another weed that is subject to eradication in Australia, branched broomrape, has a comprehensive research program to ensure the campaign is achievable and cost effective. The research includes investigation of host specificity for this parasitic weed, seed ecology and chemical control measures.

AFFA is member of the CRC for Australian Weed Management, Australian Weed Committee and the former National Weed Strategy and as such is actively involved in the development of more effective methods to detect and respond to new weeds. Pre-emptive work focuses on the development of target of plant species with the potential to become serious weeds in Australia, implementation of effective general and targeted surveillance to ensure early warning of incursions and the establishment of generic processes for efficient and effective response. Through these bodies and others, AFFA is also maintaining and improving risk assessment methodology to develop appropriate quarantine measures to prevent establishment. Both of these activities are supported by formal and informal networks to acquire, assess and utilise information from international and domestic sources and to respond appropriately through the Australian Weeds Committee, Consultative Committee on Exotic Plant Incursions which is chaired through the Office of The Chief Plant Protection Officer. For example this year alone there have been 10 new weed records that have considered, most of which have been established at low levels and have and are in the process of being scoped and appropriately responded to.

In addition, AFFA is working closely with Plant Health Australia, which has been supported through Commonwealth funding to assist industries to develop biosecurity strategies. In this process appropriate and agreed pre-emptive research may be highlighted to conduct pre-emptive activities for industries to support preparing for specific pest threats including weeds.

JCPAA question 18

During the hearing in Sydney, Diageo Australia Ltd raised several issues concerning AQIS inspections on behalf of FSANZ

- Would you respond to the suggestions that the 'one in twenty' inspection rate for labelling discriminates against high volume importers in comparison to low volume importers?
- Instances of breaches in labelling were mentioned which appear not to have been followed up-would you respond?

AQIS control over imported alcohol

All imported foods must comply with both Australia's *Quarantine Act 1908* and the *Imported Food Control Act 1992* which addresses food safety issues. All the issues raised by Diageo Australia Limited relate to the requirements of the *Imported Food Control Act 1992* and the food safety standards set out in the Food Standards Code (FSC). The administration of the FSC is the responsibility of Food Standards Australia New Zealand (FSANZ).

Alcohol has been classified by FSANZ as a random surveillance food and is therefore inspected at a rate of 5% (1 in 20 consignments).

Diageo Australia Limited raised concerns over AQIS enforcement of the labelling requirements of the FSC for food (including alcohol) imported for sale in duty free outlets.

They also raised the issue of parallel imports. AQIS's role in the monitoring of imported food for its compliance with the FSC is to ensure food safety. AQIS does not have responsibility for parallel imports, which is solely a commercial issue.

IMPACT OF 1 IN 20 INSPECTION RATE ON HIGH VOLUME IMPORTERS

As alcohol is selected at the rate of 5% (1 in 20 consignments) of all imports, larger importers will be selected for inspection more often than smaller importers due to the higher number of consignments imported.

BREACHES IN LABELLING

Diageo Australia Limited raised an issue in relation to 'breaches of labelling', the issue also related to parallel imports.

The labelling breach alleged by Diageo Australia Limited in relation to other importers, was fully investigated at the time of the original complaint. When AQIS examined the goods in question, they were found to be compliant with the FSC.

Currently, when an import is inspected and found to be non compliant with the labelling requirements of the FSC a holding order is placed against the supplier of the product. This means that future imports of that product from that supplier are inspected more intensely, regardless of who imports the product. This might not take full account of importers who develop special relationships with suppliers to ensure product they specifically import is labelled correctly.

Amendments to the *Imported Foods Control Act* that are currently before Parliament will enable the targeting of importers of products in breach of the labelling requirements of the FSC rather than targeting the supplier. This will ensure that increased inspection rates will be assigned to the importer of the noncompliant product rather than the supplier, thereby encouraging importers to ensure labelling meets the Australian requirements before AQIS inspection occurs.

Both standard drinks and importer details are essential components of alcohol labels. Standard drinks labelling is a food safety issue which enables consumers to determine a safe quantity of alcohol to consume. Importer details are essential in the traceability of the product.

With relation to Diageo Australia Limited's concerns about domestic priorities, products on the domestic market fall within the jurisdiction of the relevant State and Territory health departments.

Supplementary Information from AFFA For jcpaa

ISSUE

Containerised sea-cargo - Quarantine intervention process. During Hearings and inspections of AQIS operations, the Committee indicated interest in this issue. This information has been prepared to aid the Committee's understanding.

sea cargo in containers

Purpose of this paper is to describe the process used by AQIS to manage the quarantine risks associated with imported containerised sea-cargo.

Imported Sea-Freight

In 2000-01, there were 1.24 million sea-freight containers imported into Australia. Of these 85% were loaded with cargo, 15% were empty.

Typically, 96% of all loaded containers entering Australia hold cargo for one consignee only – these containers are referred to as Full Container Load or FCL containers. The remaining 4% are containers holding cargo for multiple consignees, these are termed Less than a Container Load or LCL containers. Figure 1 provides a high level diagrammatic representation of the quarantine cargo clearance system for imported sea-cargo (refer below).

Information about all loaded containers must be entered into the Customs databases; Sea Cargo Automation (SCA) and COMPILE. These electronic databases are information platforms on which details that are relevant both to customs and quarantine are kept. When consignment details are loaded into COMPILE, quarantine profiles stored within the system are used to identify and hold consignments that contain cargo or packaging that is of quarantine interest. The system then electronically refers the details of these consignments to AQIS import management systems for further attention. SCA holds information about the actual containers and is used to control holding, movement and release of containers.

AQIS systems take information by direct entry and from Australian Customs Service (ACS) systems to process information for quarantine purposes, and to validate it with ACS systems. At this point, AQIS officers make decisions about whether the consignment requires inspection or can be cleared on the basis of the documentation provided.

The external surfaces of all containers are inspected by AQIS for contamination. On average, approximately 13% of all imported, loaded containers (or 11% of all imported containers) are inspected internally by AQIS. A brief description of the physical quarantine clearance process follows:

At the wharf

AQIS staff externally inspect all imported shipping containers as they leave the wharf area under the AQIS External Container Inspection Regime (ECIR). This inspection is carried out to check for the presence of quarantine contaminants such as soil, grain and animal matter and hitch hiker species. The procedure is mandated by Government and plays a crucial role in preventing the entry of exotic pests and diseases, especially weeds and insect pests. Where contamination is detected, containers are either cleaned on site or directed to an approved cleaning depot in the wharf precincts, depending on the level of contamination present.

Follow-up inspections for external contamination can be conducted at tailgate inspection locations (see below) and this opportunity is used to gather data about the effectiveness of the ECIR process.

Empty containers

Data compiled by ACS indicates that approximately 180,000 imported empty containers are unloaded in major Australian ports each year. As detailed earlier, AQIS is currently inspecting the external surfaces of all imported containers as part of its External Container Inspection Regime. In addition, the internal surfaces of imported empty containers from Giant African Snail (GAS) infested countries/ports and from high-risk African ports are being inspected at wharves throughout Australia. These particular types of empty containers are targeted because, historically, they have been found to present an unacceptable level of quarantine risk. Results obtained through these inspection activities and random data collection indicates that detected items are of concern to quarantine and include material such as:

- Seeds
- Insects and frass (insect excreta)
- Rodents
- Fruit and vegetables containing exotic maggots and used fruit cartons
- Straw and infested dunnage, and
- In an extreme case, human remains containing exotic maggots

Although current inspection processes target those empty containers that are considered to present the highest levels of quarantine risk, AQIS acknowledges that empty containers from other ports continue to be of concern. A co-regulation project is currently under development that will ensure that all imported empty containers are inspected for contaminants of concern to quarantine.

There are an estimated 71 businesses located around Australia that currently receive and clean (for commercial reasons) imported empty containers. The majority of these establishments are located close to the wharf environs and provide a place for AQIS to implement a co-regulation scheme to examine the portion of empty containers that are not inspected by AQIS under existing arrangements. For AQIS, co-regulation (using a compliance agreement) represents the most cost effective option to address the quarantine risk posed by quarantine contamination in empty containers.

This priority project will address the potential quarantine risks by entering into a compliance agreement with industry to examine, clean and where appropriate, direct

to AQIS, all imported empty containers entering Australia. This examination and/or treatment of containers under this scheme will occur at empty container parks and has the potential to ensure an acceptable degree of risk mitigation.

Loaded containers

AQIS manages a wide variety of quarantine risks associated with imported cargo. These risks can be generally categorised as those associated with the cargo itself and those associated with the packaging or other material used as an aid in shipping the cargo.

Cargo

Imported cargo may be of concern to AQIS for one of three reasons -

- 1. The cargo has been assessed as having an unacceptable probability of harbouring an organism that represents a quarantine risk for Australia,
- 2. The cargo itself represents an unacceptable level of quarantine risk for Australia, or
- 3. The cargo is subject to regulation under the Imported Food Control Act because of its potential to pose a human food safety risk.

All imported sea-freight is screened for items of quarantine concern using electronic profiles in the COMPILE database. Consignments that are held for assessment by AQIS are subject to documentary assessment to determine whether inspection and/or treatment are necessary to mitigate the potential quarantine risks associated with the cargo. Unlike items imported through the mail or as passenger's baggage, cargo is documented and subject to commercial controls which provide a degree of assurance about the nature of the cargo being imported. A recent Victorian survey of consignments cleared on documentation showed that less than one percent of such shipments contained items of quarantine interest.

Where inspection and/or treatment are required, the physical inspection and, if necessary, treatment of goods of quarantine interest are carried out to bring them into compliance with Australian legislation. The AQIS Import Management System (AIMS) is used to manage consignments that are referred to AQIS for assessment, inspection and/or treatment. AIMS is also used to document quarantine directions and record the concluding release of the cargo.

Packaging

Packaging used for shipping cargo can present quarantine risks of its own. Untreated timber pallets can provide easy passage of entry for potentially destructive organisms. Straw could likewise harbour serious diseases of cereal crops such as wheat and oats.

In response to these risks AQIS requires that all FCL containers imported into Australia are covered by documentation stating what packing materials have been used in the container and what treatments (if any) have been carried out to mitigate quarantine risks associated with the material. These documents are assessed by Customs Brokers operating under a rigorous co-regulatory scheme. This scheme, developed in conjunction with the Customs Brokers and Forwarders Council of Australia (CBFCA) and subject to audit, shares the responsibility for managing quarantine risk with industry in a way that delivers efficiencies and benefits for AQIS and industry. As with cargo, if packaging is found to require inspection or treatment, an AIMS entry must be created and the consignment referred to AQIS for appropriate treatment before it can be released.

Tailgates

Where there is an assessed need (type of cargo, documentation issues etc), imported containers are "tailgated" at quarantine-approved premises. This consists of opening the rear door and inspecting the packed contents visually. This is a mandatory process for all containers with rural destinations (see below).

Rural Destination containers

All containers destined for delivery outside the metropolitan area are subject to tailgate inspection by AQIS officers at quarantine-approved depots, prior to leaving the metropolitan area. This process ensures that AQIS has an opportunity to detect contaminants of quarantine concern where they are being delivered to areas which have a higher vulnerability to pests and diseases.

LCL

All LCL containers (ie containers where there are multiple consignees) are unpacked at quarantine-approved depots and are subject to surveillance by AQIS officers. Packaging materials removed from LCL containers are controlled in this way. In addition, where the cargo associated with an LCL consignment is of quarantine concern, a specific inspection of that cargo is required prior to its release from AQIS control.

Proportional checking and inspection

3% of all imported consignments are referred to AQIS through random, statistically based process for control and documentary checks. Where anomalies are detected or suspicions aroused, the container and goods can be directed for a physical inspection.

Measuring Effectiveness

The quarantine cargo import system contains management and administrative controls to ensure that the process operates as designed.

AQIS is establishing a reporting system covering each of the areas described in the attached diagram (figure 1), relating to the management and administrative controls. The reports can be used individually to monitor the performance of a particular process, and collectively to gain assurance over the effectiveness of the whole system. The reporting system looks at:

- Container exteriors
- Packing materials
- Goods

The reports will not only give a picture of the items moving through the border, but will contain information on the effective operation of the controls so that the whole process is subject to continual review and strengthening.

The quarantine cargo import system consists of management controls within this process to ensure that the process operates as designed. The controls are layered (ie in series). In other words, each control gains some strength and assurance from the ones

before it. For example, the checks by AIMS already have the benefit of the profile checks by COMPILE directing appropriate items of quarantine interest. Similarly, any post-quarantine checks are on the back of the assurance already gained at the border.

There is also an amount of internal validation of the operation of the controls. As an example, AQIS measures the effectiveness of its external container inspection process by recording data about the cleanliness of those containers that are destined for rural delivery. Since those containers going to rural areas are inspected again after the initial wharf-gate inspection, data collected at this secondary inspection is used to calculate the effectiveness of the external container inspection system. AQIS uses this data to refine procedures and to promote consistency and innovation.

Summary

As shown in figure 1, quarantine intervention for containerised sea-cargo relies on an integrated system of checks and inspections involving electronic referral, profiling, random checks, documentation checks and physical examinations.

These systems are being further enhanced through initiatives such as the Customs container x-ray project, empty container co-regulation system and an incidents reports and recording system built in AIMS to allow more targeted referrals.



Figure 1. Quarantine clearance of imported sea-freight

Supplementary Information from AFFA For jcpaa

ISSUE

Passenger processing at airports - the Green and Red Channel. This information is provided to the Committee in response to interest expressed in Red and Green Channel processing and the resultant seizures captured in each of these channels.

red and green channels at airports

All passengers complete an Incoming Passenger Card, the front of which incorporates quarantine, customs and immigration declarations – see below:

Incoming passenger card	• •	ustralia	YD	MUST ANSWER EVERY QUESTION - IF UNSURE, X Yes		
PLEASE COMPLETE IN ENGLISH WITH A BUI	JE OR BU	CK PEN	► Ace	yau bringing into Australia:		
Family/sumare			1.	Goods that may be prohibited or subject to restrictions, such as medicines, steroids, freams, weapons of any kind or illicit drugs?	Yes	No
Given names		2.	More than 1125mL of alcohol or 250 cigarettes or 250g of tobacco products?	Tes	No	
Passport namber			8	Goods obtained overseas or purchased duty and/or tax free in Australia with a combined total price of more than AUD5400, including gfts?	1915	No
			4.	Goods/samples for business/commercial use?	705	No
Flight surriber or same of ship			5.	AUD510,000 or more in Australian or foreign currency equivalent?	Yes	No
 Intended address in Australia 			6.	All food - includes dried, fresh, preserved, cooked, uncooked?	Yes	No
			7.	Wooden articles, plants, parts of plants, traditional medicines or herbs, seeds, bulbs, straw, ruts?	Yes	No
Do you intend to live in Australia for	State		B.	Animals, parts of animals and animal products including equipment, eggs, biologicals, specimens, birds, fish, insects, shells,		
the next 12 months? Yes		140	L	bee products, pet food? Sal, or articles with soil attached, ie. sporting equipment, shoes, etc?	105	No
 If you are NOT an Australian citizen: 				Have you visited a runal area or been in contact with, or near,	140	nev .
Do you suffer from taberoulosis?	905	No		farm animals outside Australia in the past 3D days?	Tes	No
Do you have any criminal conviction/s?	365	No	▶11.	Have you been in Africa or South America in the last 6 days?	Yes	No
DECLARATION The information / have given is the, com complete. I understand failure to answer questions may have serious consequence	81	YOUR S	CNATUR	E Day Month Year		TURN OVER THE CARD

Passengers who have nothing to declare go to the Green Channel while passengers with goods to declare go to the Red Channel. These processing channels are located behind the baggage collection area.

The majority of passengers carrying quarantine items declare those items and are processed through the Red Channel. For this reason there are more undeclared seizures in the Green Channel than in the Red Channel. Depending on the risk these items pose, they may be returned to the passenger, seized, treated, or re-exported. In addition to inspecting all declared items, AQIS officers also undertake intuitive searches and thus intercept undeclared items in both the Red and Green Channels.

During the period January to June 2002 there was a total of 166,146 seizures in the Red Channel, comprising 145,273 declared and 20,873 undeclared. In this same period, seizures in the Green Channel totaled 48,074, most of which were undeclared.

Pre-IQI and Post-IQI processing strategies

The following diagrams show the breakdown of passengers on the basis of their quarantine and customs declaration and reflect the difference in processing strategies between pre-Increased Quarantine Intervention (IQI), up to February 2001, and post-IQI since March 2001.

The pre-IQI figures reflect passenger arrivals from July 2000 to June 2001 while the post-IQI figures are based on passenger arrivals from July 2001 to June 2002.

Post-IQI, the majority of passengers exiting the Green Channel have their bags xrayed, while 6% of passengers are 'overflowed' at peak times to avoid unacceptable delays and congestion. In these circumstances, quarantine officers apply profiles to restrict the 'overflow' to low risk passengers. These 'overflow' clearances are also subject to detector dog screening.

The vast majority of Quarantine Infringement Notices (on-the-spot fines) are issued to passengers exiting the Green (nothing to declare) Channel. These passengers have completed and signed a declaration stating that they are not carrying items of quarantine concern. Consequently, when x-ray or other examination reveals items which should have been declared, the trigger for an infringement notice is established.




ISSUE

The Committee has asked a number of questions relating to the capacity of Australia's technical support in an emergency animal disease outbreak including vets and diagnostic laboratories.

The capacity of technical support in an emergency Disiease outbreak

Australia has access to excellent technical resources through the CSIRO, especially the Australian Animal Health Laboratory. There are many world-renowned experts in specialist fields working at AAHL, as well as at other state and territory government laboratories. It is essential that Australia continue to review the depth of the resources available and the specialist expertise required for many different animal diseases.

The States and Territories government bodies are responsible for the management of a response to an emergency animal disease incident. The Commonwealth has limited legislative power and responsibility to respond to an emergency disease situation. The main role of the Commonwealth is support, facilitation of the national response, international reporting and financial management of the response.

The States and Territories have varying capacities to respond to an emergency disease outbreak. There are veterinarians available for various roles but coordination of a response at all levels has been identified as a critical issue. For example, the Northern Territory has identified that only a few field veterinarians are employed by the government. In contrast to this, New South Wales has the Rural Lands Protection Board system, which acts to provide a ready reserve of government trained field veterinarians in an emergency event, in addition to NSW Agriculture staff. There are also a number of veterinarians and scientific officers who provide advice on epidemiology, international reporting and monitoring, procedural matters (such as CCEAD) and other important technical issues, many of these staff being employed by AFFA and state/territory departments of agriculture.

A number of training schemes administered by Animal Health Australia, with support from AFFA, exist for veterinarians and other animal health staff. The training programs are mainly designed to equip staff at the ground level with the necessary skills to perform tasks in a local disease control centre (LDCC). Many training programs are being provided by state/territory departments of agriculture at a local level, which involve the technical support people, as well as emergency services, welfare agencies and other support groups.

A shortage of appropriately trained veterinarians has been recognised, and this deficiency was highlighted by the United Kingdom in their 2001 FMD outbreak. Whilst there are available veterinarians ready to assist in an emergency outbreak, the issue of trained veterinarians has come under scrutiny. To address this issue, AFFA is developing the concept of a veterinary reserve, utilising current information that exists for other similar schemes, such as the International Veterinary Reserve. The veterinary reserve concept was discussed at a non-government veterinarian workshop in April this year, and, subject to endorsement by various levels of government, significant progress is envisaged by early next year.

ISSUE

Reliance on swift clearances for imported vaccines (including anthrax) during animal disease emergencies. In evidence, the Committee noted the dependence on imported vaccines, such as for Anthrax.

swift clearances for imported vaccines

AFFA has identified some of the key vaccines that would require priority clearance in the event of an emergency disease outbreak. Current work has focused on the footand-mouth disease vaccine, Newcastle disease (ND) vaccine and Anthrax vaccine. Cooperation between AQIS, National Registration Authority (NRA) and PIAPH has enabled establishment of efficient mechanisms to clear these vaccines. Anthrax vaccine has current clearance from both AQIS and the NRA, and Fort Dodge, the importer of the vaccine, hold adequate doses of the vaccine in stock in Australia for emergency use. An emergency supply of FMD vaccine has been secured and will be swiftly available in the unfortunate event of an outbreak. ND vaccine supplies continue to be adequate to cover industry needs, and clearance for live ND vaccine has been established so that stocks are readily available in Australia.

The Veterinary Committee has established the Emergency Use of Vaccines working group to consider other emergency vaccine requirements. This working group has been established to cover broader issues involved with the clearance and registration of vaccines, and tasked with developing a framework for vaccines required in an emergency situation. This group will identify key strategies that will enable AQIS, NRA, PIAPH and key industry bodies to work together to facilitate the efficient import and emergency use of key vaccines. The working group has been tasked with the development of an emergency use protocol and the identification of key vaccines that may require urgent clearance in the event of an emergency animal disease incident.

ISSUE

The Committee asked questions about arrangements for handling unauthorised vessels and other 'remote' incidents between Customs, Immigration Quarantine agencies.

Unauthorised vessels

The arrival of unauthorised vessels and aircraft into Australia is of quarantine interest. Such vessels, passengers and cargo have in the past been detected carrying a range of exotic pests, diseases and weeds that could be introduced into Australia if the quarantine risk was not properly managed.

AQIS enjoys a good relationship with Coastwatch and is an active member of the Coastwatch Operational Planning Advisory Committee (OPAC) and Regional Operational Planning Advisory Committees (ROPAC) in Cairns, Darwin and Broome. These committees oversee the Coastwatch surveillance programs and AQIS regularly submits taskings to the OPAC meetings where the requests from all clients are considered.

During the last few years, there has been a significant increase in the number if Suspect Illegal Entry Vessels (SIEVs) and the Suspect Unlawful Non Citizens (SUNCs) on board these vessels. The countries from which these vessels have departed generally have a large number of serious pests, weeds and diseases that are exotic to Australia. This includes Foot and Mouth disease, Rabies, Screw Worm Fly, fruit flies, mosquitos (which carry diseases of concern to human health) and weeds (such as Siam weed).

AQIS is involved in the response to the arrival of all SIEVs and has arrangements in place to maintain 24-hour contact with Coastwatch and other relevant agencies. Coastwatch advises AQIS each time a vessel is detected. When a vessel is detected off the coast of Australia (including on Ashmore Reef) the Royal Australian Navy and/or Customs have primary responsibility for transporting the SUNCs (and the vessel if appropriate) to the mainland. This is done in consultation with AQIS to ensure any issues of quarantine concern are properly managed. AQIS officers play a significant role in clearing and processing the SUNCs and the vessel on arrival at an Australian mainland port.

In cases where an unauthorised vessel makes an undetected landing on the mainland, AQIS is involved in the response party that travels to the incursion site. Under the *Quarantine Act 1908* it is an offence for any person or item to be removed from the vessel without the approval of a Quarantine Officer. Some Customs officers also hold quarantine powers under the *Customs Act 1901* as well as delegations under the *Quarantine Act 1908*. In practice, the two agencies work closely together to manage the often complex issues arising from SIEV arrivals.

ISSUE

The Committee took evidence regarding possible inconsistencies with container inspection and cleaning practices between Melbourne and Sydney.

ALLEGED INCONSISTENCIES IN CONTAINER Processing

At the JCPAA hearing in Melbourne representatives from the Independent Paper Group (IPG) raised a number of concerns about alleged inconsistencies in sea cargo container inspection and cleaning practices between Melbourne and Sydney, including:

- 1. A higher proportion of containers sent for wash in Melbourne as compared to Sydney;
 - 2. Different interpretations of what constituted high level and low level contamination on containers between Melbourne and Sydney;
 - 3. Higher industry costs for cleaning containers in Melbourne (approximately \$400) compared to Sydney (approximately \$260);
 - 4. Longer turn around time for cleaning containers for Melbourne compared to Sydney.

In March 2002, a senior AQIS officer was invited to address a meeting of the IPG in Sydney. As a result of the meeting, the Assistant Regional Manager, Victoria personally reviewed the inspection of a large shipment of containers imported by a member of the IPG into Melbourne on 30 April 2002. The IPG member had been informed that his supplier had cleaned the containers at the port of loading prior to shipment to Australia. At inspection, a proportion of containers were identified as having high-level contamination. Photographs of the containers were not as clean as expected. Nothing further has been raised by the IPG with AQIS subsequently.

There are significant differences in the types of containers that arrive in each port of Australia. For example Melbourne receives a higher proportion of empty containers compared to Sydney. The variation in container type and countries of origin will influence the types, frequency and extent of contaminations on containers. AQIS undertook an extensive peer review of container inspection practises in Melbourne, Sydney, Brisbane and Adelaide in May and June 2002. The review did identify minor variations in identification and examination practices in each region. Work instructions and training materials have now been revised and distributed to all container inspectors.

Contamination rates for containers vary between regions. The proportion of containers sent for washing in Sydney during the May-July 2002 quarter is 2.0% compared to Melbourne's 3.5%. AQIS believes that a difference of around 1.5% in the proportion of containers sent for washing is explainable in terms of the different types of imports into the two ports. AQIS is actively working with industry to further refine its practices.

Only one company provides cleaning facilities in Melbourne. This has a direct influence on the cost and time taken to clean containers. These facilities are privately owned and operated by industry and AQIS has no control over the costs or time delays experienced within these establishments. AQIS management in Victoria has held preliminary discussions with key industry groups to expand cleaning facilities and infrastructure. A senior officer from AQIS will undertake a review in Melbourne to determine if other cleaning facilities can be approved beyond the immediate port environs. This review will look at the potential risks of contaminated containers moving within high volume traffic areas.

Following the JCPAA hearing in Melbourne on 3 September, AQIS instigated a meeting with the IPG on 11 September 2002 to discuss IPG's concerns. The meeting was positive and AQIS and IPG have agreed to work together to resolve any ongoing issues. The AQIS Regional Manager, Victoria will also address a meeting of the IPG on 20 November 2002.

ISSUE

Funding Science Support for Tasmania raised by Tasmanian Government submission.

Funding operational Science Support for Tasmania

During the past two years diagnostic services for international quarantine border responsibilities have been provided through the AQIS Victorian office. This enhances service delivery by concentrating critical mass for operational science activities. In addition operational science staff visit the Tasmania region on an as needs basis to provide training for operational staff and maintain close liaison with State based diagnostic officers. This arrangement has addressed the Tasmania Regions requirements for scientific diagnostic services.

Activity levels relating to international border responsibilities in Tasmania do not justify the allocation of dedicated scientific resources as the vast majority of international goods and passengers entering Tasmania do so through Melbourne as the point of entry. The service standards for operational science support for Tasmania match those provided within other AQIS regions.

The State Government is responsible for funding the provision of scientific and diagnostic services relating to interstate and post border issues.

SUPPLEMENTARY INFORMATION FROM AFFA FOR JCPAA

ISSUE

Threat Posed By Screw Worm Fly - Information Request During Torres Strait Visit

Screw Worm Fly

Screw-worm flies (SWF) are 'blowflies' that are obligate parasites of warm-blooded animals, including humans. Parasitism of animal tissues by SWF larvae (myiasis) causes serious livestock production losses in countries where the fly occurs.

The Old World SWF (OWS) occurs throughout much of Africa, the Indian subcontinent, Southeast Asia and Papua New Guinea (PNG). The New World SWF (NWS) is endemic in parts of Central and South America as far south as Argentina. It has been eliminated from the United States, Mexico and several Central American countries, where it was previously endemic, using the sterile insect technique (SIT).

SWF has never become established in Australia and the potential economic consequences of entry into Australia are great. The SIT is the only basis for effective control and eradication of SWF but technology transfer between countries with NWS, such as the USA, and OWS, such as PNG, is very difficult due to the divergent nature of the two species.

In response to the nearby threat of OWS to the extensive pastoral cattle producing areas of northern Australia, Australia has been undertaking research on OWS for many years. The introduction and establishment of the NWS into Australia is considered unlikely due to its location in respect to Australia. However, in 1992, NWS larvae were identified in a lesion on the back of the head of a person who had just returned to Australia from a visit to Brazil and Argentina.

Australia has undertaken an extensive range of activities over many years, particularly the last decade, to develop the science and operational procedures to prevent, to control and to enable an effective eradication response to be implemented if needed.

HISTORY

In the 1970s and 80's, CSIRO established a small research laboratory in Port Moresby to study OWS and a SWF mass-rearing facility was established at Laloki, on the outskirts of Port Moresby. Field trials were conducted aimed at developing the sterile insect technique (SIT) for OWS. Also two major government reports were prepared on prevention and eradication of SWF in Australia.

In 1988, OWS were trapped in an empty livestock vessel in Darwin that had just returned from the Middle East. In response, a Department of Primary Industries and Energy (DPIE) review of the Laloki project reported that the Laloki unit was inadequate if SWF had dispersed significantly. In February 1990, the Australian Agricultural Council (AAC – now Primary Industries Ministerial Council) endorsed the recommendation of the review panel that the Laloki unit be closed. A National Working Group Report, *A National Review of Australia's Longer Term Screw Worm Fly (SWF) Preparedness Strategy*, was completed in June 1990. This report provided the direction for SWF preparedness activities for the next decade including establishment of a Management Committee. The Management Committee, with both government and industry representatives, oversighted the first phase of the SWF Preparedness program.

THE LONGER TERM STRATEGY

During 1990, a number of government and industry representatives travelled to Indonesia, Brunei, Malaysia and the USA for consultation on technical information on SWF control; advice on aspects of our SWF preparedness; suitability for collaboration on OWS research and for SIT validation trials. In December 1991, another delegation visited Malaysia to assess a potential location for a regional SWF pilot facility with the Institut Haiwan, Johor State being selected.

In 1990, consultant engineers Crooks, Michell, Peacock, Stewart Pty Ltd (CMPS), a CSIRO entomologist and a DPIE officer conducted a study of sterile insect production plants for SWF and fruit flies in Hawaii and Mexico, as well as the Laloki OWS unit in PNG and the Western Australia Department of Agriculture Queensland Fruit Fly unit in Perth. A major report was submitted to DPIE in 1991 and in 1992 CMPS prepared a design for a pilot sterile OWS production facility to be constructed. The report also outlined plans for the conduct of SIT field trials. After extensive government and industry consultation, sufficient funding was procured.

In 1996, CMPS SE Asia Pty Ltd built the pilot mass rearing facility at the Institut Haiwan where novel production engineering methods were applied to the mass rearing of OWS. In addition, a laboratory-adapted colony of OWS was established and field trials confirmed confidence in the efficacy of SIT for OWS.

Surveillance

A review of SWF surveillance in northern Australia was undertaken by DPIE in 1991. This review recommended strengthening of the extension component of the North Australia Quarantine Strategy (NAQS) SWF surveillance program conducted by the Australian Quarantine and Inspection Service, with support at a central reference laboratory at CSIRO Division of Entomology in Canberra.

Diagnostic manual

A manual for differentiating SWF from other common insects in the region, *Manual for the Diagnosis of Screw-Worm Fly* by JP Spradbery was published by CSIRO Entomology for DPIE and distributed in late 1991. The manual was reprinted as a revised version, with minor corrections and additions, in November 2001.

Training Courses

A number of training courses, with supporting reference materials, emerged in the early 1990's for scientists and technical officers from Departments of Agriculture. Also in the early 1990's two reports were commissioned by DPIE on the risk of entry of SWF via livestock vessels. CSIRO Entomology and the Bureau of Rural Sciences (BRS) were commissioned to assess the risk of introducing SWF into Australia by the livestock export trade. These reports recommended improved procedures of SWF surveillance on vessels.

Emergency Plans

The Australian Veterinary Emergency Plan disease strategy for screwworm fly was released in 1991. The agreed policy is to eradicate SWF in the shortest possible period while limiting economic impact using a combination of strategies including sterile insect technique (SIT), quarantine and movement controls, decontamination and disinsection, tracing and surveillance, treatment, zoning and a public awareness campaign. The AUSVETPLAN SWF disease strategy was revised in 1996, with only minor amendments for the second edition.

Modelling Incursions

In 1993 the Queensland Department of Primary Industries, in consultation with other agencies and industry, progressed a bio-economic model of a SWF incursion in Australia. The model concluded it is likely that extensive cattle production as practised in northern pastoral areas of Australia would not be viable if SWF became established. The failure of the livestock industries would severely impact on the towns servicing the industries, and human cases of OWS myiasis could also occur. The model indicated that there is merit in construction of a facility and mothballing it until required. In general, options for sterile SWF production and release to start early in an outbreak require smaller capacity and lower costs, as the pest distribution would still be restricted and demand for sterile SWF's will be correspondingly limited.

Public Awareness

Public awareness and early reporting of suspect myiasis has been given major emphasis, especially in northern Australia. There is a NAQS awareness campaign, a video by the CSIRO Australian Animal Health Laboratory, and training for veterinarians and other health professionals to the threat of SWF.

International Activities

In 1998, Australian officers contributed to international Pest Management Conferences in Penang, Malaysia and in Vienna, November 1998. In recent years, Australian scientists have also acted as consultants to international programs in the Middle East and attended an International Atomic Energy Agency (IAEA) Consultants Meeting on SWF genetics in January 2001.

RECENT PROJECTS

In 2001 engineering consultants, Asia Pacific Consultants, produced a design brief for a 250 million sterile OWS per week facility for possible construction within Australia if ever it were required, drawing upon the knowledge and experience from the pilot facility at the Institut Haiwan and other studies in north and central America.

The Screwworm Fly Emergency Preparedness Conference held in Canberra in November 2001 reported on the current state of knowledge of SWF and its control. It also provided an opportunity for examining the future direction of research and the further development of SWF preparedness and response arrangements for Australia and the South East Asian Region. A copy of the proceedings is attached.

In January 2002, PISC/PIMC endorsed the recommendations of the November 2001 SWF Conference that Animal Health Australia (AHA), a not-for-profit public

company, should manage the project "Progress Australia's SWF Preparedness Strategy". This was a significant tactical change as previous to this, Agriculture, Fisheries and Forestry – Australia had managed all facets of Australia's SWF preparedness.

The report from conference proposed that AHA should establish a wideranging consultation process with animal health, plant health, R&D and industry organisations to resolve issues relating to appropriate directions and state of readiness for SWF. The issues to be considered include possible options for SIT production facilities capable of being used against a range of plant and animal pests and/or being used to control SWF in nearby countries.

The AHA project will have two distinct stages. The first will include a detailed review of all aspects of the threat to Australia posed by SWF; possible response strategies; resource capability to respond to a SWF incursion; and other insect pests or disease vectors affecting livestock and plant industries in Australia and the nearby region. The second stage will include extensive industry consultation, and resolution of issues arising from the first stage of the project.

Currently, NAQS performs continuous monitoring for SWF incursion in the Torres Strait, Northern Cape York Peninsula, the Northern Territory and the north of Western Australia. Lures and traps are used to monitor for adult SWF, while sentinel animals, particularly cattle, are checked for myiasis. In recognition that incursion is most likely to be detected by the presence of maggots, public awareness programs inform pastoralists, indigenous communities, rangers, school groups, hunters and travellers about SWF. Maggot collecting kits are distributed widely. There have been no detections but several suspect flies have required examination by experts.

All returning livestock vessels are treated with insecticide prior to arrival. The Port Surveillance program of AQIS monitors for SWF at ports using the same traps, lures and identification techniques as NAQS. There have been no detections since the 1988 detections in Darwin.

AQIS and Animal Biosecurity are funding ongoing research, with strong industry endorsement, into improved traps and lures for early detection, and for better identification mechanisms using molecular techniques.

ISSUE

The Submission to the Committee from the Queensland Environmental Protection Agency recommends that it should be included in agreements for the Northern Australia Quarantine Strategy (NAQS).

Queensland Involvement in NAQS Agreements

An agreement between AQIS and the Queensland Department of Primary Industries (QDPI) was developed and agreed in 1996. This focuses on consultation and the resourcing of pest and disease monitoring and surveillance, and response activities in northern Queensland.

QDPI has recently confirmed that it is the key agency and contact point for liaison on exotic pest and disease monitoring, surveillance and detections in Queensland.

SUPPLEMENTARY INFORMATION FROM AFFA FOR JCPAA

Torres Strait Quarantine Presentation During this inspection tour of the Torres Strait members of the Committee asked for copies of the presentation by Shane Ahboo – NAQS Operations Coordinator on Thursday Island. A copy is attached.