Summary
Plant industries, governments and the wider community are currently exposed to the risk of emergency plant pests and the current framework for managing pest eradication efforts is now regarded as needing improvement to a more sustainable basis. For this reason, Plant Health Australia is negotiating a world first Emergency Plant Pest Response Deed between industries and governments to fund responses to emergency plant pests.

Introduction
Governments and plant industries are facing a future with increasing international trade and tourism, growing movements of mail, cargo and machinery (see graphs), and the ever present potential for plant pests to enter Australia via natural means. The Australian Quarantine and Inspection Service (AQIS) is committed to ensuring harmful pests are excluded from Australia, and at a national level, maintain a low risk/conservative approach to quarantine, based on sound science and policy, and compliance with relevant international agreements.

Despite all quarantine measures, serious pest incursions will occur in the plant sector, via either natural means or human actions, and plant industries and governments have agreed that the current response and funding arrangements needed to be developed to a more sustainable basis.

Plant industry bodies and the Australian and State/Territory governments established Plant Health Australia (PHA) as a public company in April 2000 with the challenge of taking a partnership approach to key plant health issues and enhancing Australia’s ability to respond to both exotic and emergency plant pests. Since late 2000, PHA has been working closely with its plant industry and government members to establish a world first Emergency Plant Pest Response Deed.

Background
The history of pest and disease cost sharing arrangements between the Australian Government and the States/Territories goes back to the 1930s, with a standard cost sharing formula adopted by the Standing Committee on Agriculture and Resource Management (SCARM—now the Primary Industries Standing Committee—PISC) in July 1993 (Reeves, 2001).
Under this formula, the Australian Government currently contributes 50 per cent of the costs of eradication, while State/Territory governments share the remaining 50 per cent apportioned on the gross value of production (GVP) of susceptible crops in each state or territory.

In the animal sector, this cost sharing formula was confirmed in an agreement that covered 12 specific diseases. An Emergency Animal Disease (EAD) Response Agreement between peak livestock bodies, States/Territories and the Australian Government was ratified in March 2002, with 63 animal diseases categorised under the agreement.

Until now, no formal deed addressing funding for Emergency Plant Pests (EPPs) has ever been established in the plant sector.

**Why is a formal Emergency Plant Pest Response Deed required?**

The lack of formal government level arrangements has a number of disadvantages that hamper the most effective possible pest responses.

Most significantly, costs borne by industry are generally not recognised, and there is little legislative support to make payments to growers affected by an emergency pest incursion—potentially providing a strong disincentive for growers to report suspect pests. The benefits of early reporting are illustrated by an incursion of Papaya Fruit Fly (PFF) detected in Queensland in 1995, which cost some $34 million to eradicate, with industry indicating additional costs of $100 million due to loss of production (Reeves, 2001). Philippines Fruit Fly was detected in Darwin in 1997 and subsequently eradicated at a cost of approximately $5 million (ARMCANZ, 1998). Although both outbreaks were successfully eradicated, the Papaya Fruit Fly incident in Queensland incurred greater costs as the pest had spread further before being discovered and reported to authorities.

Secondly, there is no formal industry involvement in decision-making, although industries are currently engaged as observers on key decision-making committees.

Thirdly, there are ongoing pressures on agriculture budgets and agriculture departments increasingly need to seek funds directly from treasury or finance departments each time they wish to secure funding for an individual pest eradication campaign. This can significantly delay a response and lead to increased eradication costs.

Lastly, as there is no formal Emergency Plant Pest Response Deed, PISC could change the cost sharing arrangements at any time and any jurisdiction could decide not to participate without breaking any formal, signed agreement.

**Emergency Plant Pest Response Deed (EPPRD)**

PHA members endorsed the preparation of an Emergency Plant Pest Response Deed for the plant industries based on the following agreed points:

- cost minimisation to all parties;
- early detection and response;
- ensuring rapid responses to emergency pests/diseases—excluding weeds in the first instance;
- appropriate criteria for eradication (must be technically feasible and cost beneficial);
- an agreed list of potential emergency plant pests, including diseases;
- an industry commitment to biosecurity and risk mitigation and a government commitment to best management practice;
- eligible cost payments to growers involved in pest eradication efforts;
- a cap on contributions (based on local value of production);
- an effective industry/government decision-making process; and
- a limit in scope (to only cover emergency pest or disease threats relevant to PHA member industries).

The EPPRD broadly involves categorising the most serious emergency pests for each industry according to the severity and impact of the pest, as well as the public and private benefits of eradication, and determining and agreeing on cost sharing arrangements in advance of an emergency. Cost sharing categories are listed on the following page.

**A more effective decision-making structure**

Under the EPPRD, plant industry and government representatives will have equal involvement in decision-making and technical committees formed to consider a response to an emergency plant pest and if government and industry cost sharing should proceed. In addition, the EPPRD will be underpinned by PLANTPLAN—a national emergency preparedness and response plan for the plant industries co-ordinated by PHA.

**Owner reimbursement costs**

The deed will include owner reimbursement costs so that industry costs (e.g. destruction of crops or increased labour costs) will be formally recognised and cost shared. This will help recognise the financial burden that industry members face in assisting eradication efforts, and remove disincentives for growers to report suspected emergency pest outbreaks. Industry will also be formally involved in all decision-making, and as funding arrangements are pre-agreed, responses should be undertaken far more rapidly than at present.
Table 1. Cost sharing categories

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<th>Category</th>
<th>Description</th>
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| Category 1: Very high public benefits | EPPs which if not eradicated or contained would:  
  • cause major environmental damage to natural ecosystems;  
  and/or  
  • potentially affect human health or cause a major nuisance to humans; and/or  
  • cause significant damage to amenity flora; and  
  • have relatively little impact on commercial crops.  
  This category also covers situations where the pest has a very wide range of hosts including native flora and there is considerable uncertainty as to the relative impacts on different crops. In short, it is almost impossible to properly determine which industries benefit from eradication and to what extent, and in any case, the incursion primarily affects native flora and/or amenity plants, and/or is a major nuisance if not a health risk to humans. | 100% government funding |
| Category 2: High public benefits | EPPs which if not eradicated or contained would:  
  • cause significant public losses either directly through serious loss of amenity, and/or environmental values and/or effects on households, or indirectly through very severe economic impacts and regions or the national economy, through large trade losses with flow on effects through the economy; and  
  • impose major costs on the industries concerned so that these industries would benefit significantly from eradication. | 80% government funding, 20% industry funding |
| Category 3: Moderate public benefits | EPPs which if not eradicated or contained would:  
  • primarily harm the industries concerned but there would also be some significant public costs as well (that is, moderate public benefits from eradication). The EPP could adversely affect public amenities, households or the environment, and/or could have significant, though moderate trade implications and/or national and regional economic implications. | 50% government funding, 50% industry funding |
| Category 4: Mainly if not wholly private benefits | EPPs which if not eradicated or contained would:  
  • have little or no public cost implications and little or no impacts on natural ecosystems. The affected industries would be adversely affected primarily through additional costs of production, through extra control costs or nuisance costs; and  
  • generally there would be no significant trade issues that would affect national and regional economies. | 80% industry funding, 20% government funding |
Commitment to risk reduction and biosecurity
As well as outlining the funding arrangements for emergency pests, the deed includes significant risk minimisation obligations for both industry and government in recognition that all parties should seek to proactively reduce both the risks and potential costs of emergency plant pests.

Greater transparency, accountability and certainty in funding
Pre-determined limits on liability are included to ensure eradication costs do not exceed the financial capacity of either industry or government parties. In addition, cost sharing will only commence when pest eradication is determined as being both cost beneficial and feasible, and all response efforts will be independently audited upon completion.

Conclusion
PHA is aiming to have the Emergency Plant Pest Response Deed formally ratified by late October 2004. The deed will be a world first in the plant sector and vital for minimising pest and disease risks and the associated financial and social costs of pest eradication, and for establishing a genuine industry/government partnership approach to managing responses to emergency plant pests.

Specific information on the Emergency Plant Pest Response Deed can be found at www.planthealthaustralia.com.au/EPPRD

Information on PHA is available from www.planthealthaustralia.com.au

References
Reeves (2001) Funding and compensation for emergency eradication of exotic plant pests and diseases: A discussion paper. Plant Health Australia, Canberra, ACT.


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Mr Garth Donovan is Communication Manager with Plant Health Australia (PHA), a non profit company limited by guarantee, formed to assist the development of an internationally outstanding plant health management system that enhances Australia’s plant health status and the sustainability and profitability of plant industries.