

NURSERY PAPERS

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Managing emergency plant pest incursions

In 2005, Nursery & Garden Industry Australia (NGIA) formally joined the Australian Commonwealth and State/Territory Governments as a signatory to the Emergency Plant Pest Response Deed (EPPRD). The EPPRD is a plant biosecurity partnership agreement that sees Australian industries and Governments cooperating as equal parties in the management of emergency plant pests (EPPs).

In this month's Nursery Paper, Queensland Industry Development Manager John McDonald explains the purpose of the Deed, its significance for EPP management, and the rights and responsibilities of our industry as one of the parties to this world-first agreement.



Managing emergency plant pest incursions The Emergency Plant Pest Response Deed (EPPRD) and the nursery industry

A formal seat at the table

Nursery & Garden Industry Australia (NGIA) formally joined the Australian Commonwealth and State/Territory Governments as a signatory to the Emergency Plant Pest Response Deed (EPPRD) in mid-2005. This has placed the nursery industry alongside many other sectors in horticulture including banana, sugarcane, cotton, citrus, and mango in a world first plant biosecurity partnership agreement. This agreement between industry and the government sees both parties cooperating as equal parties in the management of emergency plant pests.

By giving industry a seat at the 'national table', the EPPRD grants it the status of an equal partner in emergency plant pest management. However, with this seat comes an industry-wide responsibility to manage on-farm biosecurity and participate in national strategies to mitigate or minimise the introduction and spread of emergency plant pests (EPPs).



With a large number of hosts including many *Eucalyptus* spp, Sudden Oak Death (*Phytophthora ramorum*) would be addressed as a Category 1 EPP under an eradication plan.



Glassy-Winged Sharp Shooter transmits a bacterial disease that destroys infected crops. If introduced to Australia, it would be targeted for eradication as a Category 2 EPP.

Emergency Plant Pest Response Deed (EPPRD)

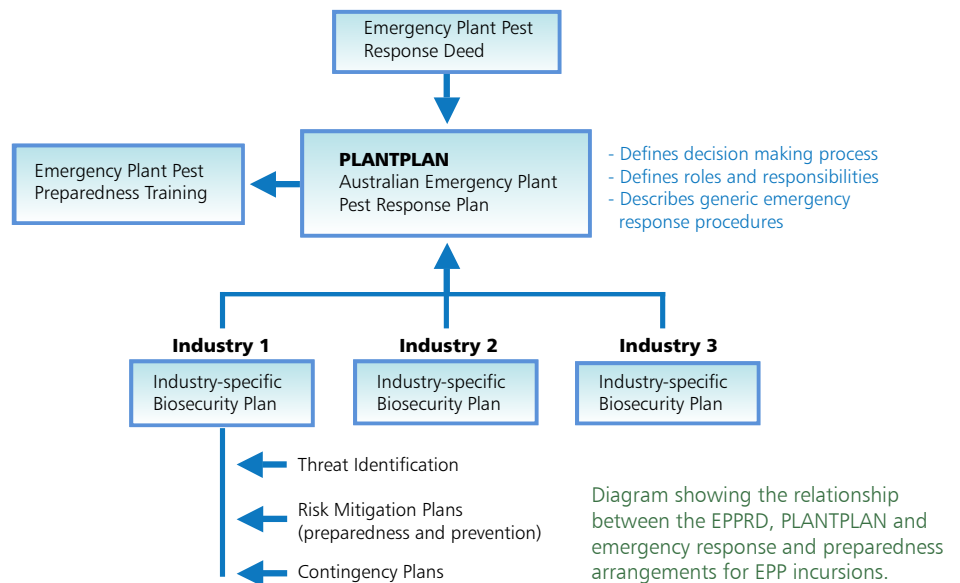
The EPPRD is a complex legal document that spells out the rights and responsibilities of, and relationships between, each signatory to the 'Deed'. It also places a legal obligation on each and every member (government and industry). This responsibility and obligation is legally enforceable and aims to ensure that the response across Australia to an Emergency Plant Pest (EPP) is timely, consistent and effective. It also strives to ensure the decision making process is transparent, accountable and shared.

Past experience demonstrates that an effective, efficient and well structured process is needed to address the ongoing incidence of emergency plant pest incursions and repair the fractured relationships between levels of government and industry. It has also been acknowledged that even though industry is the major stakeholder in any biosecurity action, the opportunities for industry to meaningfully contribute to the solution has in the past been limited. The common goals of both industry and government are to protect our community, environment and industry from any exotic emergency plant pest incursions and, in the event of an incursion, effectively manage and/or eradicate it.

The EPPRD brings together stakeholders with a common goal under a framework of shared responsibility and defined rights and obligations.

The EPPRD links to other documents that support the management of an EPP. These documents include PLANTPLAN and the Nursery Industry Biosecurity Plan.

PLANTPLAN is a detailed strategy and guide outlining the structure and management of the response to an EPP. The Nursery Industry Biosecurity Plan lists the pest threats specific to the nursery industry and sets out an industry wide approach to preparing for and managing plant pest risks.



What is an Emergency Plant Pest (EPP)?

- An EPP is defined in the EPPRD as follows:
- A known exotic plant pest that could have an adverse economic impact regionally and/or nationally if established in Australia
 - A variant form of established plant pest that could have an adverse economic impact regionally and/or nationally if established in Australia
 - A serious plant pest of unknown or uncertain origin which may be an entirely new plant pest, or one listed in Schedule 13 of the Deed
 - A plant pest of potential economic importance to the area endangered and not yet present there or being officially controlled.

Defining the EPPRD

- The EPPRD defines the essence of the agreement between all signatories and outlines how and what each party must do when managing an EPP incursion. The EPPRD also describes the following key items:
- The categorisation of EPP into one of four categories (1 – 4)
 - Development and Management of a Response Plan
 - PLANTPLAN documentation
 - The rights and responsibilities of signatories during an EPP incursion
 - The structure and function of the decision making committees
 - The phases of an incursion
 - The reimbursement available to producers directly affected by a EPP eradication
 - The cost sharing arrangement between government and industry.

Owner reimbursement costs

- A critical aspect of the EPPRD is that for the first time affected growers may be able to receive payments that reimburse costs associated with an EPP. These reimbursements cover:
- Direct eradication costs incurred by the Owner of the plants
 - The lost value of the damaged/destroyed crops. There is a formula within the Deed that calculates the costs for each industry sector
 - Costs and losses resulting from an order that the property lie fallow for a given period.
- The underlying premise is that growers or owners of the destroyed crop will not be better or worse off as a result of the incursion.

Categorising EPPs and funding the response

The ranking or categorisation of each EPP is linked to where the greatest benefit of eradication or containment of the EPP is most likely to fall (that is, public versus private benefit of eradication). This is because this calculation dictates the proportion of cost sharing between industry and government. For example, a Category 1 EPP will trigger full government funding for eradication while a Category 4 EPP will trigger a distribution of 20% government and 80% industry cost sharing of the eradication expenses.

The four categories are:

Category 1

The eradication of Category 1 EPPs would have very high public benefits

Funding: 100% Government

Examples: Sudden oak death and Dutch elm disease.

Category 3

The eradication of Category 3 EPPs would have moderate public benefits as well as private benefits

Funding: 50% Government, 50% Industry

Examples: Russian wheat aphid and rice water weevil.

Category 2

The eradication of Category 2 EPPs would have high public benefits but also private benefits

Funding: 80% Government, 20% Industry

Examples: Citrus canker and Pierce's disease.

Category 4

The eradication of Category 4 EPPs would have mainly, if not wholly, private benefits

Funding: 20% Government, 80% Industry

Examples: Wheat streak mosaic virus and armyworm.

The EPPRD also sets out the Funding Weights, that is, the apportionment of costs, when multiple industries are affected by the EPP incursion. In this way, the industry component of the eradication costs is also shared based on the degree of 'benefit' to each industry.

The Australian Government is committed to underwrite the industry cost/liability for an EPP response with a maximum 10 year payback period permitted. The Deed also specifies that any given response plan will not exceed the agreed value of 2% of the annual Local Gross Value (LGV) of production of the affected industry parties. To cover the cost of an EPP response plant industries will need to establish a national 'Biosecurity Levy' that ensures all beneficiaries share the cost of the response.

The structure and function of decision making committees

Under the Deed the process for making decisions is explained with the intent to formally include and give equal rights to all stakeholders and members throughout the EPP incursion response. Representatives from the nursery industry sit on each of the key committees established under the Deed including:

1) National Emergency Plant Pest Management Group (NMG)

This committee has the primary responsibility for decisions in an eradication program. The NMG will only begin responding to an EPP when it has received a Response Plan that details all the costs and processes of the eradication campaign. This committee has the final say in determining if the response is eradication, containment or no action.

The committee consists of representatives from:

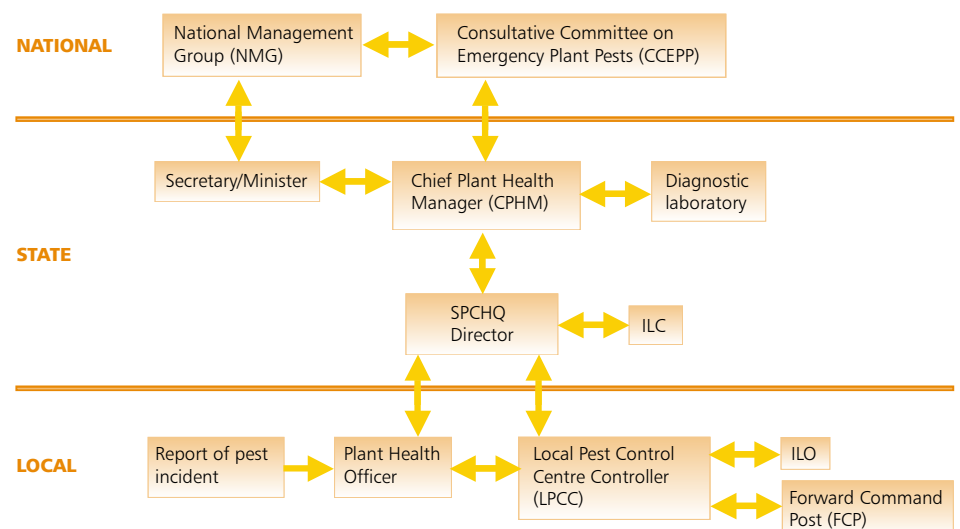
- Secretary of Department of Agriculture, Fisheries & Forestry (Chair)
- CEOs of State/Territory Government Departments of Agriculture
- A representative from affected industry parties (e.g. NGIA)
- Chairman of Plant Health Australia (non-voting)

2) Consultative Committee on Emergency Plant Pests (CCEPP)

This is the technical committee that makes recommendations to the NMG on incursion management responses. In particular this includes a recommendation on the technical feasibility and economic justification of eradication. Representative from government agencies and industry (e.g. NGIA) are members of the CCEPP.

The CCEPP is responsible for:

- Developing Response Plans with budgets
- Advising NMG and implementing NMG decisions
- Providing ongoing technical advice and risk management recommendations
- National planning, coordination and liaison
- Developing draft communication briefs



Communication and Management Structure for a EPP under the EPPRD and PLANTPLAN

Eradication – how do the committees decide?

When an incursion of an emergency plant pest (EPP) is discovered perhaps the most critical decision is whether to attempt eradication or instead, try to minimise spread ('containment'). Two key factors are required to trigger a response for eradication:

- The eradication must deliver positive benefit(s)
- The eradication must be technically feasible.

The decision then rests on the following factors:



Giant African Snail has spread rapidly across the Pacific in recent years. With 500 plant species as known hosts, this pest can be easily transported around Australia if allowed to establish unchecked.

Factors favouring eradication	Factors favouring containment
Cost benefit analysis shows significant economic loss to industry, the community and the environment if the organism becomes established	Cost benefit analysis shows relatively low economic or environmental impact of the organism establishing
Physical barriers and/or discontinuity of hosts between production districts	Major areas of continuous production of host plants
Cost effective control difficult to achieve particularly the availability of protectant or curative treatments	Cost effective control strategies available
The regeneration time, population dynamics and dispersal of the organism favour more restricted spread and distribution	Short regeneration times, "explosive" population dynamics and long distance dispersal lead to rapid establishment and spread
Pest bio-control agents not known or recorded in Australia	Widespread populations of known pest bio-control agents present in Australia
Vectors discontinuous and can be effectively controlled	Vectors unknown, continuous or difficult to control
Outbreak(s) few and confined	Outbreaks numerous and widely dispersed
Trace-back information indicates few opportunities for secondary spread	Trace-back information indicates extensive opportunities for secondary spread
Weather records show unfavourable conditions for pest/disease development	Weather records show several optimum conditions for pest and disease development
Ease of access to outbreak site and location of alternate hosts	Terrain difficult, problems accessing and locating host plants

Note: It is important to remember that any plant industry that does not sign up to the EPPRD is left out of the decision making process. Such an industry is not entitled to grower reimbursement of costs.

What does industry need to do?

Australia averages 40 incursions of exotic pests per year across the nation. A good percentage of these do not impact on plant industries. However, it is vital to the sustainability of the industry and our environment that we take measures to mitigate the risk and minimise the impact of any incursions.

Strategies to achieve this include enhanced on-farm biosecurity control through:

- Efficient pest monitoring/surveillance
- Appropriate pest management and hygiene
- Plant quarantine inspections
- Professional record keeping
- Staff training
- Restricting access to the property
- Sourcing stock from professional businesses
- Applying best management practice (NIASA, EcoHort & BioSecure HACCP)
- Reporting unidentified pests/diseases.

For further information

Contact your state or territory Nursery Industry Development Officer for further information on the Emergency Plant Pest Response Deed or emergency plant pest incursions. To access the documents named in this Nursery Paper visit the Plant Health Australia website:
www.planthealthaustralia.com.au.

Acknowledgements

This Nursery Paper was written by John McDonald, Industry Development Manager – Nursery & Garden Industry Queensland (NGIQ).

References

- Emergency Plant Pest Response Deed
- PLANTPLAN
- Nursery Industry Biosecurity Plan
- EPPRD Workshop Toolkit