

**Submission to the Senate Rural
and Regional Affairs and
Transport Committee
Inquiry into the
Citrus Canker Outbreak**

**Queensland Department of
Primary Industries and Fisheries**

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1 Introduction

1.1 Terms of reference of Inquiry

The Senate Rural and Regional Affairs and Transport Committee has been established to inquire into and report on the Department of Agriculture, Fisheries and Forestry's administration of the citrus canker invasion with particular reference to:

- AQIS's response to the allegations of illegal importation of plant material;
- the adoption of the quarantine protocols and management of the emergency response
- cooperation between the Commonwealth and States, including issues provision
- the impact of the incursion on the Australian citrus industry
- prevention and management of future incursions
- other related matters.

The Department of Primary Industries and Fisheries (DPI&F) seeks to inform the committee of its involvement in events relevant to the inquiry by addressing each of the Terms of Reference. Statements made in this submission are based on documented evidence that can be made available to the committee upon request. This submission does not address events or actions taken beyond the knowledge of DPI&F.

Names and acronyms used in this submission include:

2PH – Otherwise known as 2PH Farms and the Pressler property

ABARE – Australian Bureau of Agriculture and Resource Economics

AQIS – Australian Quarantine and Inspection Service

CCEPP Consultative Committee Emergency Plant Pests

Cordoma – Emerald citrus grower

CPPO – Commonwealth Chief Plant Protection Officer

CTLV – citrus tatter leaf virus

CTV – citrus tristeza virus

DAFF – Australian Government Department of Agriculture Fisheries and Forestry

Delimiting surveillance – surveillance to determine the extent of disease spread

Destruction zone – area where trees have been, or will be, destroyed

DPI&F – Department of Primary Industries and Fisheries (formerly DPI)

DQMAWG – Domestic Quarantine Market Access Working Group

EMAI – Elizabeth Macarthur Agricultural Institute, operated by New South Wales Department of Primary Industries

Epidemiology – The study of the distribution and causes of disease occurrence in a population

Evergreen Farms – property owned by Pacific Century Production Pty Ltd, located in Emerald. Largely a citrus and grape enterprise. Became IP1

Host plants – plants susceptible to the disease

Iddles – Emerald citrus grower

IP1 – Infested Premises one, Evergreen Farms.

IP2 – Infested Premises two, owned by 2PH Pty Ltd. Otherwise known as 2PH Farms and the Pressler property

IP3 – Infested Premises three, owned by Selma Citrus. Otherwise known as the Iddles' property.

Native citrus – *Citrus glauca* and other species native to Australia

NCCEP – National Citrus Canker Eradication Program

NMG – National Management Group

OCPPO – Office of the Commonwealth Chief Plant Protection Officer

PCP – Pacific Century Production Pty Ltd

PHA – Plant Health Australia

PIMC – Primary Industries Ministerial Council

PISC – Primary Industries Standing Committee

PLANTPLAN – a set of agreed national guidelines covering management and response procedures for post-border emergency plant pest incursions of national significance

PQA – Pest Quarantine Area

PRA – pest risk analysis

Pressler – Emerald citrus grower

QCG – Queensland Citrus Growers Inc.

DPI&F – Queensland Department of Primary Industries (former name)

Rutaceae – The plant family which includes citrus

SAG – Scientific Advisory Group (sometimes referred to as SAP)

The Deed – Draft Emergency Plant Pest Response Deed

2 Context

Throughout the current response to the outbreak of citrus canker in Emerald, several parties have been calling for there to be a judicial or Senate inquiry into the citrus canker outbreak.

Much of this would seem to stem from a basic suspicion that the current outbreak is linked to the investigations conducted by the Australian Quarantine and Inspection Service (AQIS) in 2001, which followed reports to AQIS that there had been illegal importation of citrus and other plant material onto the Evergreen Farms property in Emerald. This property subsequently became Infested Premises number 1 (IP1), the property on which citrus canker was first detected in June 2004.

Canker was detected on the commercial citrus property referred to as Evergreen Farms near Emerald on 28 June 2004, with confirmation of the disease on 2 July 04. Canker was subsequently detected on the 2PH Selma Road property (IP2) on 5 October 2004, and on the Iddles' property (IP3) on 23 May 2005.

Once citrus canker was confirmed, a national emergency plant pest response, the National Citrus Canker Eradication Program (NCCEP) was planned and implemented as part of an agreed national framework for the management of plant pest incursions of a national significance. The Queensland Department of Primary Industries and Fisheries (DPI&F) has been the agency responsible for implementation of the response, with all eradication and financial decisions determined by national consensus through a National Management Group (NMG).

As citrus canker was determined to be a pest incursion of national significance, the NCCEP was established to deliver the eradication objectives, as agreed through the national framework. As surveillance, destruction and other NCCEP activities were occurring in Queensland, the State was responsible for implementing the intent of the NMG resolutions through the Queensland legislative framework.

3 Term of Reference 1: AQIS's response to the allegations of illegal importation of plant material

3.1 Commonwealth and State responsibilities and obligations

The Australian and state/territory governments share complimentary responsibility for plant biosecurity.

Under the Commonwealth Constitution, the Australian Government has responsibility to prevent or control the introduction of serious pests and diseases into Australia. This is implemented primarily through the quarantine measures applied at the point of entry into Australia, and through limited subsequent controls at the immediate post-border level. The *Quarantine Act 1908* (Cth) provides for the prevention or control of the introduction, establishment or spread of diseases or pests that will or could cause significant damage to human beings, animals, plants, other aspects of the environment or economic activities. The Act provides for the declaration of a quarantinable disease, the declaration of a quarantine area, and a prohibition on the removal of plants and goods from any part of Australia.

State agencies have responsibilities for post-entry surveillance and incursion response. Queensland's *Plant Protection Act 1989* and its subordinate Regulations provide for the response to a pest or disease incursion through the declaration of a quarantine area and supports action to be taken to control, eradicate and limit the spread/distribution of pests or diseases of plants. The quarantine and response provisions in the Act are only applied where evidence of an exotic pest or disease exists through detection or diagnosis, or where reasonable grounds (capable of withstanding legal challenge) exist that an exotic pest or disease threat is present.

Excepting the formal legislative division of federal and state responsibilities, clear delineation of when and where border control ceases and pest incursion responses commence, are yet to be defined. Specific plans to deal with post-border pest incursions have been developed, such as PLANTPLAN. These, however, do not indicate when a state agency led national emergency pest response should be implemented. Some generally accepted principles have been in operation for a number of years, but these exist largely as 'corporate memory' and have been departed from in specific cases.

3.2 Alleged illegal importation of plant material

Following AQIS's receipt of allegations of illegal importation of plant material by Evergreen Farms, owned by Pacific Century Production, in June 2001, AQIS executed a search warrant on Evergreen Farms on 26 and 27 July 2001. All investigations relating to alleged illegally imported material were undertaken under the *Quarantine Act 1908*. The full details of and background to actions by AQIS were

presented to this Senate Committee during the hearing on 22 June 2005, and form no part of this submission by DPI&F.

On 24 July 2001, AQIS contacted DPI&F requesting assistance with the inspection of Evergreen Farms during the execution of a search warrant obtained to investigate alleged illegal importation of plant material. The assistance requested was specifically to identify established insect pests to eliminate them from investigations of possible exotic insect species.

DPI&F Director of Horticulture subsequently requested that Mr Dan Smith, Senior Entomologist, accompany AQIS to Emerald to assist in their investigations. On 26 July 2001, Mr Smith accompanied AQIS to Evergreen Farms and reported to DPI&F Director of Horticulture that he did not observe any exotic pests on the plants inspected.

On 9 August 2001, the Commonwealth Chief Plant Protection Officer made direct contact with DPI&F requesting the provision of information that would allow the Commonwealth to respond to legal action by Evergreen regarding loss of income due to the quarantine in place on the property. DPI&F recommended that the services of a professional loss adjuster be secured.

DPI&F was also contacted by lawyers acting for Pacific Century Production (PCP - owners of Evergreen) in August 2001, expressing concern over the impact of AQIS's actions on the economic viability and reputation of their client. This communication outlined concerns over the AQIS action on Evergreen Farms and sought assistance from DPI&F 'in securing a result which ensures the future health of the Australian agriculture industry and enables our client to maintain and build upon its current investment in rural Queensland.' They also sought an 'investigation into the conduct, merits and motives of AQIS in undertaking an investigation in such a prejudicial manner'.

DPI&F received other similar letters from Mr Darwin King of PCP. DPI&F responded that, as the matter was the subject of ongoing legal and other action by the Commonwealth, and specifically noting the appeal lodged by PCP challenging the AQIS quarantine orders, it was inappropriate for DPI&F to become involved.

Michelle King of PCP also made contact with local DPI&F staff in September 2001, seeking advice and possible assistance to establish a monitoring program on the property that may assist PCP in its efforts to have quarantine impositions on the property removed. DPI&F again advised that, due to the ongoing legal matters and other interaction between PCP and the Commonwealth, it was inappropriate for DPI&F to become involved

3.3 Disease detection

On 9 November 2001, the Commonwealth Chief Plant Protection Officer (CPPO) advised DPI&F that samples of citrus taken from Evergreen Farms during the execution of the July 2001 search warrants had tested positive for both citrus tatter leaf virus (CTLV) and citrus tristeza virus (CTV).

The CPPO advised that citrus plant samples had been tested by the New South Wales Agriculture EMAI Laboratories at Camden. Positive results had been obtained on tests for CTLV (which was already endemic to Australia) and a strain of CTV which was possibly a new strain to Australia.

As a consequence of these detections, the CPPO convened a teleconference of the national Consultative Committee on Emergency Plant Pests (CCEPP) on 14th November 2001 to discuss further action.

Consultative Committee deliberations and outcomes

The CCEPP teleconference on 14 November 2001 was convened by the CPPO, and was attended by representatives of various state agencies, the Australian and Queensland citrus industry associations, Emerald citrus growers John and Craig Pressler, specialist scientists and a lawyer representing PCP. Formal advice was provided to the CCEPP that AQIS had entered into an agreement with PCP in lieu of a quarantine directive, and that this agreement contained a confidentiality clause.

The CCEPP teleconference heard that both CTV and CTLV were present on Evergreen Farms. Questions were raised about the strains of the viruses, particularly the CTV, and the possibility that they could be natural mutations of strains already existing in Australia was indicated. It was therefore decided that further investigation involving an overseas laboratory and additional scientific expertise was warranted.

Agreed actions resulting from the teleconference were:

- follow-up in an overseas laboratory to investigate the new strain of CTV
- further genome testing of the CTV
- development by OCPPO, AQIS and DPI&F of a proposal for sampling and testing citrus in the Emerald area, including native citrus and possible sources that have supplied citrus into Emerald.

The CCEPP teleconference minutes also note that Craig Pressler wanted 'full disclosure of the arrangement between AQIS and the grower (Evergreen) before agreeing to allow testing on his property. The CPPO emphasised that the arrangements between AQIS and the grower could not be discussed.'

Confidentiality agreement

The Commonwealth CPPO first advised DPI&F of the existence of a confidential agreement between AQIS and Pacific Century Production on 9 November 2001, when contact was made to discuss the calling of a CCEPP teleconference for 14th November 2001. No details of the AQIS – PCP agreement were provided at that time, or at the subsequent CCEPP teleconference.

Following the detection of citrus canker on Evergreen Farms in June 2004, a number of parties called for the release of all details regarding the 2001 investigations undertaken by AQIS, including the confidential agreement between AQIS and PCP. The details of this agreement were released by the Commonwealth in early July 2004.

Virus identification

Following the CCEPP teleconference on 14 November 2001, Dr Pat Barkley, an experienced citrus pathologist previously employed by the New South Wales Department of Agriculture, advised that it was too premature to be able to tell if the CTV was an exotic strain, and that it was necessary to compare isolates from the same host. This was due to the fact that testing of the CTV strain had been done on what was alleged to be Ponkan mandarin, which was compared with the standard CTV strain from sweet orange.

The final report on virus isolations from material taken from Evergreen Farms by AQIS in July 2001 indicated that:

- samples were positive for CTLV
- samples were positive for genotypes of CTV that have not previously been characterised in Australia
- the 'detection of novel genotypes does not constitute conclusive evidence that the host material was obtained from overseas' – could be endemic, but not previously detected, or could have evolved independently from local strains.

It was never conclusively demonstrated that an exotic strain of either virus was involved.

Tristeza and Tatterleaf surveillance

One of the outcomes of 14 November 2001 CCEPP teleconference was that OCPPO, AQIS and DPI&F were to develop a proposal for sampling and testing citrus in the Emerald area, including native citrus and possible sources of citrus to Emerald. This was to search for evidence of citrus tristeza virus (CTV) and citrus tatter leaf virus (CTLV) in the Emerald area, given that these two viruses had been isolated from material seized from Evergreen Farms by AQIS.

Development of protocol for CTV/CTLV surveillance

In accordance with the outcomes of the CCEPP teleconference of 14 November 2001, DPI&F developed a protocol to enable the surveillance of Emerald citrus orchards for CTV and CTLV and this was discussed at a further CCEPP teleconference in December 2001.

The protocol stipulated that:

- all citrus growing properties in the Emerald citrus growing district were to be surveyed and sampled
- Evergreen Farms was to be surveyed and sampled initially
- 23 samples to be taken from Evergreen Farms, ten of which to be within 1 km of initially affected plants, with a further ten from other parts of the property including the on-farm nursery

- samples were to be taken from each other citrus property in Emerald, with samples taken from each cultivar if possible.

The CTV and CTLV surveillance program was planned to commence in May 2002.

The proposed surveillance program for CTV and CTLV in Emerald citrus orchards did not, however, proceed due to objections received from 2PH Farms, which represented over fifty per cent of the citrus trees present in Emerald at that time.

DPI&F received a letter from Lambert and Ho, lawyers representing 2PH, commenting on the proposed survey of Emerald citrus growing properties. Lambert and Ho indicated that the only basis on which access would be granted to enable DPI&F to conduct the surveys on 2PH would be if the Department gave 'an undertaking that the results of all surveys, including PCPs, be published and relate to identical testing criteria.' Lambert and Ho (for 2PH) also stated: 'In the event that the Department is unable to provide this undertaking ... our client ... must reserve its position and deny access for the purposes of conducting the wider survey'.

DPI&F advised that, in regard to survey/sampling of 2PH and the proposed wider surveillance program:

- DPI&F was not party to any agreement between AQIS and PCP, and was therefore not in a position to release or have access to information relating to the agreement
- the role of DPI&F in the survey was to assist AQIS, therefore any results would need to be released by AQIS and be subject to Commonwealth privacy guidelines
- DPI&F could not give the undertaking sought by Lambert & Ho
- Lambert & Ho and their clients (2PH Farms) should pursue the matter with the Commonwealth CPPO.

Lambert & Ho followed the matter up with the CPPO regarding release of results of survey/sampling. The CPPO responded that:

- It is normal practice of the Consultative Committee to release only general information about any survey.
- Detailed results from an individual property are only provided to the owner of that property
- Consultative Committee was unable to give any undertaking regarding the release of survey/sample results.

In 2001 there were insufficient grounds to use the existing powers of entry/surveillance under the *Plant Protection Act 1989*. It would have been necessary to enact new subordinate legislation to deal specifically with CTV and CTLV. However, at that time there was not adequate evidence to justify such a legislative response.

DPI&F sought advice on the interpretation of the *Quarantine Act 1908* and possible action under the *Plant Protection Act 1989*. This was discussed with the CPPO, and it was recommended that the best course of action would be to negotiate an

undertaking with the land owner or land owners to enable the surveillance program to be implemented.

As AQIS had taken action under the *Quarantine Act 1908*, DPI&F did not proceed under the *Plant Protection Act 1989*. It was determined that the *Plant Protection Act 1989* would be applied only where there was evidence of an exotic virus that had spread in the Emerald area, based on surveillance.

Outcome

The proposed 2002 surveys of Emerald citrus orchards by DPI&F did not proceed for of the following reasons:

- the confidential agreement involved controls over movement of plant material and on-going surveillance on the Evergreen property by AQIS inspectors and not DPI&F inspectors.
- even though it had been agreed nationally that surveys be undertaken, conduct of the surveys depended on cooperation of Emerald growers in giving inspectors permission to enter their properties.
- despite extensive negotiations, permission was not provided by growers for DPI&F inspectors to enter properties.
- action could not be taken under the *Plant Protection Act 1989* because its provisions related to exotic pests and diseases, and as no exotic pest had been found on the property, the power to enter any premises and take samples was not available.

Therefore, no further action was taken on the proposed CTV and CTLV surveillance program.

3.4 Other relevant information

Following the detection of citrus canker in Emerald in 2004, an epidemiological study of each infested property has been conducted as part of the NCCEP. There has been speculation about whether the 2004 outbreak was in any way related to the AQIS investigations of Evergreen in 2001.

The epidemiology study undertaken on Evergreen was limited by virtue of the national decision to concentrate almost exclusively on the containment and eradication of citrus canker on IP1, and not to divert significant effort at that time to disease study.

This limited study indicated that citrus canker was likely to have been present on Evergreen for at least 18 months prior to it's detection in June 2004, although it could possibly have existed at very low levels at that time. This timeframe indicates that the disease may have been present on the property since January 2003. Accurately determining the presence of the disease prior to that time is greatly compromised by a reduced ability to definitively identify the boundaries between growth flushes on a citrus tree once the plant material becomes woody.

When citrus canker was detected on 2PH Farms, the national decision was made to undertake more extensive disease studies to gain a better understanding of the disease in the Emerald environment, and to determine more conclusively the most likely time of infection.

The investigation of the citrus canker incursion on 2PH indicates that the disease is most likely to have established in January 2004. Studies on the third infected property indicate that this is also the most likely time of incursion onto this property.

Plant pest surveillance programs undertaken by the States are targeted according to risk profiles. If there are reasonable grounds or information to increase the risk profile of a particular location, sector or industry, then targeted surveillance is generally implemented accordingly. In the case of the Emerald citrus industry and citrus canker, there was no information provided to Queensland's Department of Primary Industries and Fisheries prior to the detection of citrus canker on Evergreen Farms in 2004, which would have changed the risk profile such that additional targeted surveillance was warranted.

At the time of issue of this report, DPI&F has collected no evidence that would allow prosecution of any offence under the *Plant Protection Act 1989* in relation to the detection of citrus canker within the Pest Quarantine Area, nor has it gathered additional information that it considers would contribute to investigations conducted by Federal authorities into allegations of illegal import of host materials to the property on which the disease was first detected, or to any other property within Queensland of which the Department has direct knowledge.

Through direct and constant contact between the investigating officers of DPI&F and officers of AQIS and other relevant Commonwealth agencies, it has been determined that no new or additional information has been uncovered by DPI&F regarding this allegation of illegal importation of budwood material that was not uncovered during the original AQIS investigations in 2001.

4 Term of Reference 2: The adoption of the quarantine protocols and management of the emergency response.

4.1 Emergency Response

4.1.1 Background

Canker was detected on the commercial citrus property referred to as Evergreen Farms near Emerald on 28 June 2004, with confirmation of the disease on 2 July 2004. Canker was subsequently detected on the 2PH Selma Road property on 5 October 2004, and on the Iddles' property on 23 May 2005.

DPI&F has been responsible, during this period, for implementing nationally agreed decisions made as part of the NCCEP. As a pest incursion of national significance, the NCCEP was established to deliver the eradication objectives, as agreed through the national framework. As surveillance, destruction and other NCCEP activities were occurring in Queensland, the State was responsible for implementing the intent of the National Management Group (NMG) resolutions through the Queensland legislative framework.

National framework

PLANTPLAN is a set of agreed national guidelines for managing and responding to nationally significant post-border emergency plant pest incursions affecting primary industries. The plan establishes a decision-making framework for responding to such incursions. At the national level it establishes the NMG and the CCEPP. At the state level, there is a Chief Plant Health Manager, and Director of the State Pest Control Head Quarters (SPCHQ). At a local level there is the Local Pest Control Centre and the Forward Command Post. Additionally, in September 2004, in response to the technical information requirements of CCEPP, a Scientific Advisory Group (SAG) was established to provide input to management operations of the NCCEP and to advise the CCEPP upon request.

The structure, roles and responsibilities of the NMG and the CCEPP are outlined in PLANTPLAN and other PHA documents.

4.1.2 Protocol development

DPI&F became aware of the suspected canker detection on Evergreen Farms near Emerald on 28 June 2004.

Pursuant to PLANTPLAN, Queensland was responsible for developing an emergency response plan to be endorsed nationally. The NCCEP was developed on the basis of the Draft Citrus Canker Contingency Plan of March 2004 which defines a course of action for the eradication or control of the disease. This plan was developed by the Office of the Chief Plant Protection Officer, Department of Agriculture, Fisheries and Forestry and the Australian citrus industry, based on the fire blight contingency plan, and international phytosanitary standards. The draft

contingency plan was also informed by the experience of the Florida Department of Agriculture and Consumer Services, in dealing with citrus canker.

The citrus canker emergency response plan was accepted by NMG. The decision to pursue the eradication of citrus canker was also informed by an ABARE cost-benefit analysis which indicated a significant net benefit in proceeding with eradication. NMG stated that eradication was biologically feasible and economically justified in line with the considerations to be made under the Draft Emergency Plant Pest Response Deed before eradication is pursued.

DPI&F has followed the course of action outlined in the Contingency Plan throughout the response to canker. Where significant variations to the Contingency Plan have been necessary, DPI&F has sought endorsement of these variations through CCEPP and the NMG. Queensland employed the provisions of the *Plant Protection Act 1989* to implement the NCCEP, modifying provisions where required.

Following the IP2 detection, the CCEPP noted that IP2 was within the Pest Quarantine Area and, therefore, eradication was considered feasible. NMG agreed with this conclusion. CCEPP recommended that pest free surveillance for the rest of Queensland continue, noting that any detection inside the PQA does not affect the risk profile in areas outside the PQA.

4.1.3 Quarantine, movement controls and market access

On 30 June 2004 quarantine measures were put into place to stop movement of equipment and plant material onto and off Evergreen (IP1). In order to secure the property, a team of inspectors and security guards were employed 24 hours a day to patrol the boundary of Evergreen.

A PQA was subsequently declared by Ministerial Notice under section 11 of the *Plant Protection Act 1989* on 2 July 2004. A 50 km quarantine area was thus put in place. This PQA was applied to the shires of Emerald, Bauhinia and Peak Downs. The objects of the quarantine for the PQA were to prevent or control the spread of canker in the PQA, to prevent the movement of canker into and out of the PQA, and to control or remove canker infestations in the PQA.

The Ministerial Notice was amended on 8 July 2004 to give effect to the NMG resolutions of 6 July regarding surveillance and movement controls. The notice obliged landowners in the PQA to:

- allow inspectors to enter land to survey and take samples to test for the presence of canker
- allow inspectors to treat and dispose of host plants within 600 m of an infected plant
- immediately treat regrowth of plants that have been disposed of by an inspector; and advise an inspector within 24 hours of detecting regrowth.

The Notice was further amended by the Queensland Government on 16 July 2004 to adopt the views expressed in the NMG resolutions of 9 July, being to prohibit the

movement of host plants into the PQA and place restrictions on the movement of host plants and their fruit in all areas of Queensland outside the PQA.

On 16 August 2004 a change to the quarantine notice was made, reducing the size of the PQA from the three shires to an area which largely contains the Emerald Irrigation Area and the Emerald Township. NMG supported this change.

A zoning system was established to deal with the risks associated with the movement and spread of citrus canker from IP1. The system used was consistent with the measures outlined in the Contingency Plan and was aligned to the system established in Florida as part of that state's citrus canker eradication program.

- Destruction zone – 600 m radius around where citrus canker has been confirmed
- Quarantine zone – 3.2 km radius from a destruction zone, movement of host material prohibited. Intensive surveillance of all host plants in this zone.
- Buffer zone – 3.2 km radius around the quarantine zone, with movement of host plant material prohibited. Restrictions apply to the movement of fruit from this zone. Intensive surveillance of commercial properties and a proportion of backyard citrus.
- Restricted zone – remainder of the PQA. Movement of all host material prohibited. Intensive surveillance of all commercial citrus properties and a proportion of backyard and native citrus.
- Control zone – remainder of Queensland. Restrictions apply to the movement of host material including fruit. Surveillance of all properties linked to the PQA, all citrus production nurseries and a proportion of all commercial, citrus properties, backyard and native citrus.

It was nationally agreed that there would be three quarantine risk zones; the PQA of Emerald, Gayndah-Mundubbera, and the rest of Queensland. Thus the control zone was divided into the Gayndah-Mundubbera Management Zone (GMMZ), and the rest-of-Queensland (ROQ) zone. This strategy was reconfirmed by the NMG on 13 August 2004.

The detection on IP2 did not indicate the disease had spread after the imposition of the quarantine. Therefore the existing quarantine and movement controls continued to apply. It followed that the pre-existing quarantine zones continued to apply to IP2, by virtue of its inclusion within the PQA.

Following the confirmed detection of canker, all states closed market access for Queensland citrus from midnight on 7 July 2004. In response to this movement, protocols were drafted in line with those applied in Florida and were adopted by the Domestic Quarantine Market Access Working Group (DQMAWG) to become the Queensland citrus movement protocol which allowed restricted market access for Queensland citrus. The DQMAWG agreed that the treatment and inspection protocol would address any risk in the short term, enabling trade to commence until surveillance had been completed.

Restrictions on the movement of host plants and fruit of host plants for canker within Queensland were implemented from 20 July 2004).

Restricted domestic market access (interstate and intrastate) resumed on 23 July 2004, with the requirement that all fruit be inspected, treated and certified.

Queensland was required to complete surveillance on all citrus production areas to demonstrate the absence of citrus canker. This surveillance was designed to allow for the declaration of pest free areas, leading to the re-establishment of unrestricted market access. All States, except South Australia, supported the re-instatement of unrestricted market access for the ROQ on 20 December 2004. This removed the requirement for fruit to be inspected and treated. On 24 February 2005, unrestricted market access for Gayndah-Mundubbera citrus was also obtained.

Potted and other plants which form part of the nursery industry trade were also impacted by the outbreak of citrus canker. Initially, all plants in the plant family Rutaceae (the family which includes citrus) were prohibited from interstate movement from 7 July 2004. Following a risk analysis by botanists, plant pathologists and other specialists, a much-refined list of citrus canker host plants was prepared. This left only 11 plant species regarded as possible hosts of citrus canker – of these, only six were commercially traded by the nursery industry. All other plants in the Rutaceae family were freed for unrestricted interstate trade from 20 July 2004, excepting plants sourced from the PQA or Gayndah-Mundubbera area. Plants on the revised host list required inspection, copper spray treatment and certification to move within Queensland or interstate. With the removal of all movement restrictions from the Gayndah-Mundubbera area on 24 February 2005, all nursery plants considered hosts of citrus canker could again move without restriction throughout Queensland and interstate. The PQA, however, remained closed to the entry or exit of any host plants.

Fruit from the Emerald area was sold to export markets only. The movement of citrus from the PQA (with protocols applied) did not compromise the ability of other citrus areas to re-establish domestic market access. Queensland developed the operational procedure (while satisfying the Queensland movement protocol) for the export of citrus from the Emerald area.

Surveillance program

The surveillance strategy for citrus canker followed sections 7 and 11 of the Draft Contingency Plan for Citrus Canker. Surveillance teams were led by a plant pathologist. DPI&F commenced surveillance in Emerald on 3 July 2004, with the endorsement of the CCEPP. Other States and Territories undertook surveillance in their own jurisdictions.

There were three purposes of surveillance in Emerald:

- delimiting surveillance on Evergreen Farms to determine the extent of the disease spread

- pest free surveillance on other commercial properties to ascertain that these properties did not have the disease
- pest free area or linkage surveillance on other commercial citrus producing areas, specifically Gayndah-Mundubbera and Coastal Burnett. Priority was given to those properties that had received plant material from Emerald producers.

The surveillance strategy for Emerald was to;

- survey the affected orchard
- survey the other commercial orchards in the Emerald PQA
- survey residential groves identified by tracing investigations.

The sampling of native citrus trees formed part of a second stage survey. Tree-by-tree surveillance on the affected orchard, as suggested by the contingency plan, was modified with the agreement of the CCEPP.

The surveillance used a visual method of disease detection. The procedure involved examining 600 trees per block (up to 10 ha), giving 95 per cent confidence of finding a 1 per cent infestation rate.

Delimiting surveillance was commenced in early July and completed on 18 July 2004 on all commercial citrus growing properties in the Emerald PQA. Delimiting surveillance of the suburban areas of Emerald and native citrus hosts within 6.4 kms of the Destruction Zone was also completed. All completed diagnostic results were negative for citrus canker, except for IP1.

Surveillance in the rest of Queensland was focused on trace-forward inspection of 42 commercial citrus farms and two nurseries in the Central Burnett region that were linked to the PQA through movement of citrus propagation material. This was completed on 21 July 2004 and results were negative for citrus canker. CCEPP endorsed this outcome on 23 July 2004, clearing the way for the Gayndah-Mundubbera region to regain interstate market access on an equal footing with the rest of Queensland outside the PQA.

Delimiting surveillance has also been undertaken on the Queensland nurseries which supply the majority of planting material for the state's commercial production orchards, with no evidence of citrus canker found.

Following the detection of canker on IP2, the goal was to determine the extent of the IP2 infestation. Priority activities included high intensity surveys and continued control of movement of risk material in the PQA. The immediate priority was to ensure containment of IP2 with the affected plants to be destroyed, as well as implementation of surveillance of adjacent irrigated blocks, and trace-forward and trace-back from IP2 and linked properties in the PQA.

Two large areas of citrus under centre pivot irrigation on IP2 were intensively surveyed following the detection of citrus canker within one of these. The focus of initial surveys was on higher risk sites on IP2 such as the source blocks for budwood moved out of the PQA in the past two years, and 26 sites in the Central Burnett

under overhead irrigation. Planned surveys in the rest of Queensland, and in particular the Central Burnett during late spring and summer, were then of critical importance to restore a reasonable level of confidence that citrus canker did not exist outside of the PQA.

In light of industry demand for a rapid response to the outbreak on IP2, NMG discussed the potential for bringing forward surveillance programs. It was agreed, however, that surveillance programs were timed to ensure that they coincided with climatic conditions conducive to expression of the canker.

CCEPP agreed that further surveys should be conducted in February/March or following a significant rainfall event that would promote expression of the disease if it were present. It was agreed that 100% of trees in those blocks of IP2 receiving overhead irrigation would be inspected. Backyard citrus was also to be included in further rounds of surveillance.

The CCEPP noted that all citrus (including native hosts) from within a 600 m destruction zone were removed, providing a 99 per cent confidence level of eradication.

The second round of surveillance in the PQA commenced in December 2004, covering commercial and backyard citrus. As a consequence of this round of surveillance, a further four detections of canker were made on IP2, on separate blocks, ultimately leading to the national decision by NMG to destroy all trees on IP2.

In February, citrus growers refused to allow surveillance teams access to Cordoma's and IP2, as a result of an announcement regarding financial assistance for fruit picking. Due to the blockade, the surveillance activity on commercial citrus properties in Emerald came to a temporary stop.

Surveillance was completed within the PQA outside of IP1 and IP2, with no further infections of citrus canker identified.

To confirm the disease status in the remaining commercial citrus orchards, CCEPP agreed that there should be a tree-by-tree survey of all commercial properties in Emerald, beginning in April 2005. The surveillance strategy to be implemented in the third round of surveillance was reviewed and endorsed by the CCEPP. A consensus agreement was also reached that a 600 m destruction zone would be created around IP1 and IP2 in order to remove all *Citrus glauca*.

4.1.4 Tracing

Tracing (forward/back) procedures followed those procedures in section 7.6 of the Draft Contingency Plan for Citrus Canker.

CCEPP noted that the history of IP1 was to be considered as part of the trace-back. Despite initial difficulties in obtaining complete information a full trace-back and trace-forward report for IP1 was completed and released to the CCEPP.

On 7 July 2004, a DPI&F inspector located a consignment of fruit from Evergreen Farms at the Brisbane Market. The fruit was impounded, and found positive for citrus

canker. Arrangements were made to destroy the fruit and disinfect the premises. Trace-forward was also completed for 30 bins of citrus from Evergreen Farms.

Importance was placed on linkages with the Gayndah-Mundubbera area, with targeted surveillance of those properties at Gayndah-Mundubbera and elsewhere linked with Emerald properties such as 2PH. 2PH Farms were seen as a potential link between the Emerald area and other citrus production areas through the movement of budwood. Breaking that link was part of the strategy for regaining domestic market access for areas of Queensland outside of the PQA. Trace-forward to the Golden Grove Nursery at Howard (coastal Queensland) resulted in the discovery of Eureka lemon with citrus canker symptoms. The nursery received the budwood from 2PH. The nursery was placed under quarantine as a precaution on 10 July 2004. Subsequent negative results on these samples resulted in the quarantine being lifted on 19 July 2004.

No movements of whole plants or budwood were identified from IP1 to areas outside of the PQA. All movements of commercial citrus fruit to areas outside of the PQA were traced and fully addressed. Trace-back from IP1 of plants or budwood to nurseries and other commercial citrus properties was completed. Ten businesses were identified as supplying plants or budwood to IP1. No evidence of infection was detected on the Queensland businesses identified, or on any surveyed commercial citrus orchards that had received plants or budwood from these businesses.

Through direct and continued contact between investigating officers of DPI&F and officers of AQIS and other relevant Commonwealth agencies, it has been determined that no new or additional information has been uncovered by DPI&F in completing its trace-back on IP1, particularly regarding the allegation of illegal importation of budwood material that was not uncovered during the original AQIS investigations in 2001.

4.1.5 Destruction

Destruction of infected plant material was undertaken in accordance with section 13.1.1 of the Draft Contingency Plan for Citrus Canker. The matter of containment and destruction was built into the Response Plan that was endorsed on 6 July 2004 by the National Management Group.

The detection of citrus canker on IP1 resulted in the notification of the first destruction area on IP1 on 8 July 2004. A series of samples were then collected throughout July and early August, resulting in the expansion of the destruction zone to include all citrus trees on the property. Subsequent to the destruction commencing on IP1, Evergreen sought an injunction in the Supreme Court against DPI&F on 16 July 2004. This application was dismissed. The last citrus tree on IP1 was destroyed on 4 September 2004.

On 5 October 2004, 2PH reported suspicious symptoms on citrus trees on their Selma Road property in the PQA. This was confirmed as citrus canker, resulting in the notification of the first destruction zone. There were subsequent detections on IP2 through until mid-April 2005, resulting in the destruction of all but 55 000 of the original 210 000 citrus trees on the property.

Following a new detection in March 2005, SAG discussed the issue of the disease moving into other areas within and outside IP2. The Consultative Committee was, however, advised by SAG that no change to the agreed eradication strategy was considered necessary at that time.

In April 2005, further scientific justification, via expansion of IP2 surveillance, was proposed, in order to facilitate the CCEPP's decision regarding removal of the remaining trees on IP2. CCEPP generally agreed that a change from the current 600 metre approach to destruction of all citrus trees on IP2 would represent a significant shift in the eradication program policy and any such shift would need to be appropriately justified.

The CCEPP subsequently recommended to NMG that all host plants within IP2 be destroyed, and NMG subsequently agreed to this.

4.2 Pre-emptive destruction proposal

DPI&F advised NMG on 7 October 2004 of the proposal put forward by the owner of IP2 to either destroy all the citrus trees on the property and/or in the Emerald area as the most efficient way of eradicating the disease. The main two components of the proposal were the immediate destruction of all commercial citrus trees in the PQA, and a payment of \$50 per tree to the owner of 2PH, on behalf of all growers. DPI&F was advised by the owners of 2PH on 19 October 2004 that there was no compensation element within the \$50 per tree. The proposal, and therefore the estimated costs however, did not include destruction of residential and native citrus/host plants.

4.2.1 DPI&F analysis

Under the auspices of CCEPP, DPI&F undertook a comprehensive analysis of the pre-emptive destruction proposal, on the basis of technical feasibility of eradication, economic impacts, and legal implications. DPI&F requested that the citrus industry inform this process by developing a position paper identifying why the pre-emptive destruction proposal was valid. The proposal did not overtly request compensation in addition to destruction costs, however the proposal asked for a \$50 per tree payment for destruction. This was in excess of the costs of destruction on IP1 (\$5/tree) and IP2 (\$12/tree) (The difference in cost of destruction on IP1 and IP2 was due to varying age and size of trees).

DPI&F circulated its analysis of the pre-emptive destruction proposal to CCEPP for consideration. The proposal stated that it would provide a greater chance of eradicating the disease than the current approach, and it was also hoped it would facilitate the re-opening of closed markets for citrus. DPI&F concluded, however, that pre-emptive destruction of all citrus in Emerald was not justified at this time, and that eradication via the agreed plan was feasible.

4.2.2 CCEPP and NMG consideration

CCEPP requested that SAG meet and discuss the issues and consider a range of specific questions drafted to facilitate justification of the proposal from a technical viewpoint. SAG considered:

- whether citrus canker could possibly be found in other growing regions—and this would not be known until further rounds of surveillance had been undertaken, although this is unlikely
- whether native citrus or Rutaceous plants in the area could possibly harbour the disease and provide a reservoir for re-infection, although host status of native species will not be determined for a few months
- If the proposal for 'pre-emptive eradication' was to go ahead it would allow for growers to save input cost for tree/crop maintenance.

Subsequent to SAG's deliberations, CCEPP considered whether it was 'technically necessary to adopt the proposal' (pre-emptive destruction proposal). It was agreed by the CCEPP not to adopt the pre-emptive eradication proposal at this stage and to continue with the current plan. CCEPP advised that the decision to reject the QCG proposal was done on a technical basis and not on costs quoted in the proposal. It was made clear that it was necessary to determine that canker was not outside the PQA, and that, based on the current evidence at hand, CCEPP was not accepting the proposal, although it may be that further rounds of surveillance (with new data) could change that decision.

CCEPP's conclusions were conveyed to the NMG, which confirmed on 23 November 2004 that it remained committed to a national approach to the eradication of citrus canker, based on destruction within a 600 m zone around confirmed outbreaks, and agreed that eradication was technically feasible.

In response to industry concern that the proposal had not received full consideration, a submission was put to NMG by Queensland on 22 December 2004 for further consideration regarding the pre-emptive destruction proposal, without including any compensation component. It was confirmed by the NMG that the outcomes of surveillance in Gayndah-Mundubbera were required before the proposal could be considered further.

The view of the state and territory members was that little technical justification had been provided for moving to the industry proposal of total eradication within the PQA, particularly in terms of the certainty and benefits this would provide beyond the existing program and in the context of the additional cost estimates.

4.3 2005 Domestic Market Access Proposal

In April 2005 Queensland informed NMG that a Pest Risk Analysis (PRA) had been completed in relation to the sale of citrus from PQA properties to domestic markets. The PRA used the standard methodology used by Biosecurity Australia in the Import Risk Analysis process. The pathway by which citrus canker might be carried on citrus fruit, and enter, establish and spread outside of the pest quarantine area was modelled and probability estimates were made for each step.

It was found that, for restricted domestic market access of Emerald citrus fruit, the probability of entry, establishment and spread was 'extremely low', meeting Australia's appropriate level of protection of 'very low'. It was therefore recommended by Queensland that domestic market access for Emerald citrus fruit should be

restored, on the condition of property freedom certification, inspection and approved fruit treatment and the continuance of the National Citrus Canker Eradication Program.

The CCEPP convened on Wednesday 11 May 2005 to consider the proposal put forward by DPI&F, that restricted market access should be allowed for PQA citrus fruit. States and territories were required to provide responses and make a decision in relation to market access for produce from Emerald Growers. The CCEPP noted preliminary advice from the Technical Market Access Strategy Branch that the export trade consequences of domestic movement of fruit from the PQA could range from no impact, through to an inability to continue to certify export citrus from Australia, to uncertainty as to whether citrus exports would proceed.

CCEPP sought advice from Biosecurity Australia on what implications acceptance of the Pest Risk Analysis (PRA) and subsequent domestic market access would have, in terms of minimum standards that may subsequently be applied to import proposals for canker-infested countries or regions. Biosecurity Australia advised that:

- legal interpretation under the WTO/SPS agreement is unequivocal. If you apply measures domestically to deal with particular risk then you are obliged to offer the same measures to deal with the same risk from an international source
- the application of measures to deal with the risk must be based on a risk assessment
- the PRA does conflict with the current policy, in that Australia now only accepts fruit from citrus canker free areas. Acceptance of this PRA would mean that we would accept fruit from within Quarantine Areas where the disease would be assumed to occur. So it would change Australia's current minimum standards
- if the Commonwealth engaged with other countries on the trade implications of domestic market access for the PQA, Australia would be dependent on response times from other countries, which based on past experience, would not be rapid. It is difficult to approach countries on a hypothetical basis.

The NMG decided that taking into account the judgement of all states, territories and industry, as well as international considerations, movement of harvested fruit from the Pest Quarantine Area (PQA) would not proceed to the domestic market at this point in time.

4.4 IP3 Detection and total destruction decision.

On 23 May 2005, samples were taken from Eureka lemon trees at the Iddles' property in Emerald showing evidence of citrus canker symptoms. Samples were sent to EMAI laboratories at Camden and DPI&F Brisbane. Clear positive results were subsequently obtained. The Iddles' property thus became Infested Premises 3, or IP3.

Round 2 surveillance of this block was completed between 21 December 2004 and 5 January 2005. No symptoms were evident at that stage. 6 000 of the 7 500 trees

were surveyed. Following this detection, CCEPP recommended that, in keeping with previous decisions, all trees on IP3 and *Citrus glauca* within 600 metres of the IP3 boundary be destroyed.

SAG also recommended to the CCEPP that all host plants in the PQA be destroyed on the basis that:

- canker inoculum had the opportunity to spread across the PQA through weather events
- detections outside IP1 have largely been on sites where establishment potential has been higher (e.g. overhead irrigation used)
- establishment potential across the PQA is enhanced by leaf miners and grasshoppers, via mechanical injury to trees.

SAG therefore considered that there was a possibility that low level infection remains undetected in the Emerald area.

The SAG developed the following overall summary risk assessment for commercial, non-commercial and native hosts in the PQA:

- Commercial citrus and abandoned orchards: High risk
- Non-commercial (residential) citrus: High - moderate risk
- Native citrus: uncertain risk but considered to be lower.

The CCEPP proposed a series of recommendations to NMG, based on the outcomes of the deliberations of SAG.

NMG agreed that, consistent with the scientific rationale underpinning the CCEPP's recommendation to destroy all remaining trees within IP2;

- all citrus hosts within IP3 should be destroyed
- all *Citrus glauca* (Native Lime) within 600 m of the boundary of IP3 should be destroyed
- all commercial citrus trees within the PQA be destroyed by 30 August 2005
- all non-commercial (domestic) citrus hosts, including those within the township of Emerald, be destroyed
- all *C. glauca* within 600 metres of the boundary of all commercial citrus properties be destroyed by 30 August 2005
- all *C. glauca* within 600 metres of the boundary of the township of Emerald be destroyed.

NMG also agreed that, based upon the current understanding of the epidemiology of the disease, the appropriate fallow period be set at a default period of two years commencing upon the date that the destruction of all remaining hosts is completed. This step was deemed necessary to achieve a declaration of eradication of citrus canker.

Surveillance of all commercial orchards ceased, with surveillance priorities for the eradication program focusing on any remaining native hosts and regrowth until new hosts are introduced into the PQA. NMG supported the view of CCEPP that, on the basis of experience with the disease and on the balance of the evidence presented, the eradication of citrus canker was feasible in a cost-effective manner.

The *Plant Protection Amendment Regulation (No. 2) 2005* (the Regulation), which took effect on Friday 8 July 2005, was implemented in response to the decision by the NMG to destroy all remaining citrus host plants in the Emerald PQA, without provision for owner reimbursement. The Regulation has two purposes:

1. To allow the destruction of all host plants for citrus canker, including plants which are non symptomatic.
2. To prevent action by land owners to delay implementation of the NMG decision.

5 Term of Reference 3: Cooperation between the Commonwealth and States, including funding issues.

5.1 Structure and roles

5.1.1 Formal decision structure

The formal decision-making framework for the canker eradication program is outlined in this submission against Term of Reference 2.

The citrus canker NMG was convened within the PISC/PIMC advisory and decision making framework. It was, however, implemented as an informal national management group to ensure the participation of industry through the Australian Citrus Growers and Plant Health Australia. NMG was chaired by the Secretary of the Department of Agriculture, Forestry and Fisheries, and its focus was on decisions in relation to eradication, funding and consideration of related policy issues. The CCEPP included representatives of the Commonwealth, all states and territories, and industry, and was chaired by the Chief Plant Protection Officer.

The CCEPP and the NMG operate on a basis of consensual decision-making. Non-agreement generally results in the proposing party providing further analysis and evidence to justify their position. Where one party has dissented, they have been required to justify their position. Throughout the eradication program, industry was provided with opportunity to seek clarification or put forward proposals to the CCEPP. If, however, industry had taken a different position to that of the States, it would not necessarily have resulted in non-consensus and no action. That is, industry agreement was not required to achieve consensus. Under the Draft Emergency Plant Pest Response Deed (the Deed) however, industry agreement would be required before decisions could be made.

5.1.2 Eradication program cooperation

The NMG managed the response plan and associated budget, making decisions based on advice from the CCEPP or parties where necessary. Queensland provided regular updates to NMG on the eradication program progress, budgetary or operational issues, and strategic proposals. The NMG responded to proposals and issues raised by industry, particularly regarding industry assistance.

NMG largely relied on the CCEPP to provide recommendations based on a scientific evaluation and response, and in some instances directed CCEPP to make recommendations regarding an issue at hand. Such advice was often required to include the budget implications of recommended actions. Where CCEPP considered that specific technical analysis was required to inform their deliberations, the Scientific Advisory Group (SAG) was convened to investigate options and make recommendations to the committee. Where CCEPP or NMG were not satisfied with the recommendations from SAG, more comprehensive scientific analysis was requested.

In some instances, the position of Queensland, as the combat state, was specifically sought regarding response or budgetary issues, where it was considered that the State could provide the best insight from the implementation of the NCCEP. Queensland was therefore in a position to provide CCEPP with information and review information and proposals from other parties.

5.1.3 Communication

From the outset of the citrus canker emergency response, it was nationally agreed that there should be consistency in all public communication regarding the response. The CCEPP agreed to approach communication activities as prescribed in PLANTPLAN. Queensland was responsible for communication issues regarding implementation of the eradication program, while the Chief Plant Protection Officer represented the NMG generally. Additionally, where possible, the Commonwealth, Queensland and the citrus industry sought to circulate combined press releases, for instance, when interstate trade resumed. The NMG agreed that the Commonwealth would prepare generic talking points following each NMG meeting, to be circulated to NMG members.

Communication with the Emerald and Gayndah-Mundubbera citrus industries on specific issues associated with the response was largely dealt with by Queensland (as the combat state in the national response), via local grower meetings and informal communications.

At times throughout the NCCEP, issues were raised about potential breaches of confidentiality regarding the outcomes of CCEPP and NMG meetings. At these times, members were reminded of the requirement for confidentiality, particularly as the wide range of issues discussed at meetings do not necessarily represent the outcomes of the meetings.

5.1.4 Role of industry in decision making

The NMG was convened as an informal group to ensure that industry was given an opportunity to participate through the Australian Citrus Growers. Queensland Citrus Growers also became an observer of NMG in late 2004. Queensland Citrus Growers Inc., Australian Citrus Growers Inc, and Queensland Fruit and Vegetable Growers participated in CCEPP deliberations.

Throughout the eradication program, industry had opportunity to put forward it's position, or issues of concern to the relevant national forum. For instance, in July 2004, industry put forward a request to NMG that states and territories endeavour to act consistently and simultaneously in changing import restrictions. As a result, NMG agreed that a high level of coordination between Queensland and other jurisdictions was required in relation to the resumption of interstate trade, in order to minimise disruption to industry.

In some instances, however, the national group did not support industry proposals, due to non-consensus of the participating parties. For instance, in response to concern from industry that a rapid response was required to the outbreak on IP2, NMG discussed the potential to bring forward surveillance programs, and commit

additional resources to surveillance to assist in earlier definition of the extent of the incursion. It was agreed, however, that surveillance programs were timed to ensure they coincided with climatic conditions conducive to the spread of canker, and there was a need to balance this with the concerns of industry.

5.1.5 Eradication program budget

Budget development for the emergency response and ongoing eradication program was the responsibility of the NMG, informed by estimates from both Queensland and the CCEPP. Any CCEPP recommendations to the NMG concerning the NCCEP were required to include any proposed increased funding under cost sharing arrangements. The CCEPP proposals also needed to be consistent with the arrangements established in the cost sharing agreement, in terms of eligible costs.

The costs of the eradication program were shared between the Commonwealth, states and territories, with the Commonwealth responsible for 50 per cent of all costs. The cost sharing arrangements between the states were based on the value of production of citrus for each state, and were subsequently calculated in the manner foreshadowed in the Deed.

At some stages during the development of the budget for the eradication program, concerns were raised at both the CCEPP and NMG level about the number of staff required, and the potential for individuals to adopt several of the job responsibilities specified under PLANTPLAN. At these times, Queensland was required to demonstrate that the costings and positions were justified, and to review the budget where necessary.

The NMG endorsed the eradication program budget, as it progressed, for completion of the eradication program and surveillance to confirm area freedom. Where necessary, the budget was tabled at PISC and PIMC for endorsement. The budget was progressively reviewed as the eradication program was modified.

Following the second outbreak on IP2, the NCCEP was revised to include additional surveillance, tracing and potential destruction costs. NMG requested that CCEPP provide clarification of the costs of earlier outbreaks as well as any additional costs expected from the IP2 detection. Costs for DPI&F staff were only eligible for cost sharing where backfilling occurred, and the projected costs for the response were benchmarked against other major eradication programs.

When CCEPP reviewed the budget for the IP2 response, it was acknowledged that, under a worst case scenario involving destruction within the PQA and further delimiting surveillance in other areas of Queensland, costs could rise markedly. It was agreed that, if further infection was found on IP2, a revised plan and budget would be prepared by CCEPP for NMG before any further destruction of trees took place.

In April 2005, it was further agreed that a revised budget would be prepared to estimate the costs incurred by the option to destroy all citrus plants on IP2. This revised budget was prepared by Queensland and circulated to the CCEPP. NMG subsequently endorsed the revised budget, including additional funding for the removal of all trees on IP2.

Following the decision to reject the domestic market access proposal put forward by Queensland, the NMG considered two cost sharing options for the harvesting and destruction of the remaining fruit as part of the eradication program. Option 1 covered cost sharing under the existing arrangements. Option 2 was a proposal from Queensland covering cost sharing arrangements under the principles of the proposed Emergency Plant Pest Response Deed (the Deed) whereby jurisdictions contribute up to 80 per cent of the harvesting and disposal costs including reimbursement costs to growers and a 20 per cent contribution from industry. In discussion, other jurisdictions raised concerns with Option 2 on the basis that the proposed plant cost sharing deed was not yet in place. NMG thus supported Option 1 as consistent with the existing arrangements under the agreed eradication program.

Following the detection of citrus canker on IP3 and the national decision to remove all citrus trees in the PQA, the NMG once again considered funding options to implement the agreed plan. Option 1 covered cost sharing under the existing arrangements with the indicative budget provided by Queensland identifying an estimated cost of \$3.695 million. Option 2 covered cost sharing arrangements under the principles of the proposed new plant cost sharing deed with jurisdictions contributing 80 per cent of costs and a 20 per cent contribution from industry and encompassing reimbursement costs to growers.

While industry expressed its preference for affected growers to be reimbursed for loss of trees, it did not yet have a mechanism to raise funds to meet any commitments arising from Option 2. Other jurisdictions indicated their preference for funding consistent with Option 1 on the grounds that the proposed Deed was not yet operational.

NMG therefore accepted the indicative budget provided by Queensland for Option 1 and agreed that, subject to finalisation by Queensland, it would be included in a paper for the Primary Industries Ministerial Council setting out a revised eradication program budget including all the activities that had been approved by NMG.

6.0 Term of Reference 4: Impact of the incursion on the Australian citrus industry

6.1 The Australian industry

Citrus is one of the larger horticultural industries in Australia, with a gross value of production in excess of \$400 million. There are about 3000 growers cultivating 32 000 hectares of citrus. Cost-sharing arrangements for canker eradication are based on the premise that Queensland represents 19.7 per cent (by value) of the Australian industry. Prior to the canker outbreak, the industry at Emerald had expanded to over 482 000 trees, representing 25 per cent of the total 1 950 000 trees in Queensland and approximately five per cent of the national industry.

6.2 Impact of citrus canker

The major impacts of canker on the Australian citrus industry are the progressive destruction of orchards at Emerald and broader impacts on market access.

To date, 368 500 trees have been destroyed on three infected properties at Emerald. An estimated 113 554 commercial trees remain on five blocks. A small amount of the 2004 crop was picked on IP1 prior to destruction of all trees, and the 2004 crop was the last picked on IP2 and IP3. In line with the 3 June 2005 NMG decision, all remaining trees will be removed following harvest of the 2005 export crop.

Domestic markets have been closed to all Emerald growers for the whole 2005 season. All Australian citrus growing districts except Emerald regained full market access in time for the 2005 harvest.

From the perspective of the Australian citrus industry, the loss of production at Emerald will have little impact. In fact, Mr Barry Scott, General Manager of Gayndah Packers Cooperative Association is quoted in the 12 May 2005 'Queensland Country Life' as saying that 'prices were slightly higher than last year, due to Emerald's absence from the market'. Therefore, there has been an incentive under current arrangements for other districts to keep Emerald out of the domestic market for competitive purposes.

6.2.1 Queensland Government action to promote the industry during the crisis

To minimise the economic loss to the citrus industry, DPI&F and the Queensland Department of the Premier and Cabinet developed a media and advertising campaign to encourage and increase state-wide consumption of Queensland citrus fruit by promoting the safety of the fruit in stores and the health benefits of citrus during winter. This initiative was run in conjunction with Growcom, Queensland Citrus Growers, Brisbane Markets and Horticulture Australia Limited and was the first time such a campaign had been undertaken to support a biosecurity response. The campaign was launched by the Premier and the Minister for Primary Industries and Fisheries on Sunday 11 July 2004.

Another key information tool was the daily Citrus Canker Update being distributed through industry channels, to the media, and on the DPI&F website, to provide an overview of activity, including information on markets, eradication, surveillance and public announcements. These were very well received.

6.2.2 Australian citrus industry benefit from eradication

An economic cost-benefit analysis by ABARE showed that the net benefit of eradication was over \$100 million, even if all of the citrus in the PQA must eventually be destroyed. While certain sectors of the Australian industry have experienced some gain from citrus canker detection, none of the cost has been borne by the industry outside Emerald. The response, therefore, would have been more equitable if the Draft Emergency Plant Pest Response Deed (the Deed) was finalised prior to the outbreak.

Schedule 17 of the Deed says the main objective in providing owner reimbursement costs is to offer incentives for owners to report suspicious pests or pathogens on that the basic principle is no one being worse off or better off as a result of reporting a suspected emergency plant pest incursion. The Deed proposes sharing of owner reimbursement costs.

6.3 Proposal for pre-emptive destruction

A submission from Queensland Citrus Growers (QCG) regarding pre-emptive destruction was received by DPI&F on 19 October 2004. The two main elements of the proposal were the immediate destruction of all commercial citrus trees in the PQA, and a payment of \$50 per tree for destruction costs. DPI&F undertook a detailed analysis of the pre-emptive destruction proposal and provided a report to CCEPP.

On 17 November, CCEPP rejected the QCG proposal on both technical and economic grounds. On 23 November, NMG rejected the proposal for pre-emptive destruction and reaffirmed the current national approach to citrus canker eradication.

6.4 Industry assistance

6.4.1 Primary Industries Standing Committee (PISC) Working Group

Following rejection of the Pressler Plan, NMG recognised the need for some form of grower assistance. As a result, NMG recommended to PISC that an industry/government working group chaired by New South Wales explore options to address grower adjustment issues, taking account where appropriate of the principles set out in the Deed.

The resulting paper from the PISC working group, titled 'Citrus Canker Transitional Adjustment Issues' was noted by the Primary Industries Ministerial Council on 14 April 2005. This paper outlined a range of support measures for growers. Support measures actioned by DPI&F included:

- briefing relevant financial institutions

- ensuring growers had access to farm financial counsellors
- assisting Emerald citrus growers with the identification of production alternatives.

6.4.2 Australian Government assistance

On 11 February 2005, The Australian Agriculture Minister announced an assistance package for Queensland citrus growers and citrus production nurseries. This package incorporated an interest rate subsidy paying fifty per cent of interest up to \$100 000 per year for two years, and income support at a similar rate to the Newstart Allowance.

6.4.3 Queensland Government assistance

a) Assistance to minimise pest risk from unmarketable fruit

On 14 January 2005, Queensland Citrus Growers met with DPI&F to propose an interim assistance package of \$1.22 million, incorporating \$55 000 for picking of lemons and limes. The intent of this proposal was to provide financial assistance to Emerald citrus growers for orchard maintenance.

The Queensland Government did not agree to fund the orchard maintenance proposal, however, on 1 February 2005 the Queensland Premier announced \$55 000 for two growers to ensure that their mature lemons and limes did not become a pest risk. The assistance specifically targeted lemons and limes because they were the only crops with mature/over mature fruit at that time. Both growers met the contractual requirements to minimise pest risk and full payment was made by DPI&F.

To further assist these two growers, on 24 May 2005, the Queensland Government announced an additional \$300 000 to maintain effective disease control. However, following the 3 June 2005 NMG decision to destroy all trees in the Emerald area, there was no longer justification for the Queensland Government to enter into contracts with the growers to undertake farm practices to 'maintain effective disease control'.

b) Citrus industry recovery scheme

On 9 February 2005, the Queensland Premier announced a \$1.5 million Citrus Industry Recovery Scheme for all Queensland growers. The purpose of the scheme was to enable growers to borrow up to \$500 000 to take action to maintain their viability. The loans incorporated a two-year interest-free period for Emerald growers.

Emerald growers have not accessed the loan package because of concerns about increasing debt commitments, particularly with market uncertainty. As a result, on 3 June 2005, the Citrus Industry Recovery Scheme was modified to allow the two smaller, more domestic-market dependent Emerald growers to use the loans to refinance up to \$500 000 of existing debt. Subsequent declaration of IP3 and the resulting decision to destroy all trees at Emerald changed the circumstances with respect to these loans.

6.4.4 Queensland Government proposals for assistance under the principles of the Draft Emergency Plant Pest Response Deed

- a) Cost-sharing proposal for assistance relating to NMG, rejection of the Pest Risk Analysis (PRA) for domestic market access

On 28 April 2005, DPI&F indicated to NMG that if a situation arose where, on the basis of advice from the Australian Government, the NMG declined to endorse the PRA and resumption of domestic market access, then there was a need for the NMG to consider action such as grower reimbursement under the national eradication program and cost sharing arrangements. NMG noted this Queensland and industry view, which was not supported by a number of members.

On 23 May 2005, NMG rejected a proposal from Queensland proposing cost-sharing arrangements, under the principles of the Deed, for harvesting and disposal costs for unmarketable fruit, including reimbursement costs to growers (totalling \$2.63 million).

- b) Cost-sharing proposal for assistance relating to destruction of all commercial citrus at Emerald following the detection on IP3

On 3 June 2005, NMG considered options to implement removal of all commercial and non-commercial citrus trees within the PQA as well as removal of native lime (*Citrus glauca*). The total destruction decision involved destruction of healthy trees, which was a significant departure from the previous protocol.

NMG rejected a Queensland proposal to include owner reimbursement costs, under the principles of the Deed, with jurisdictions contributing 80 per cent of costs and a 20 per cent contribution from industry. The proposed owner reimbursement costs were for 115 000 citrus trees @ up to \$80 per tree giving a total package of up to \$9 200 000. The 115 000 trees represented all commercial citrus trees standing on 3 June 2005, which were not already identified for destruction on IP2 and IP3.

- c) Current situation regarding owner reimbursement

On two occasions Queensland has put forward proposals for owner reimbursement based on the principles of the Deed. To date, there has been refusal from both industry and other government jurisdictions to provide financial assistance under these principles. As a result, the Queensland Minister for Primary Industries and Fisheries has requested that The Honourable Peter McGauran MP Minister for Agriculture, Fisheries and Forestry urgently refer the matter of owner reimbursement costs for the latest round of destruction to the Primary Industries Ministerial Council (PIMC).

6.4.5 Emerald Citrus Industry Compensation and Rehabilitation Package

The Emerald industry requested a compensation and rehabilitation package for all citrus trees standing on 1 May 2005, including \$97 per destroyed tree plus a payment of \$20 per tree until replanted trees reach productive age. This proposal is yet to be considered by NMG.

7.0 Term of Reference 5: Prevention and management of future incursions

Comments on this term of reference are provided from the perspective of an agency that has occupied the role of 'combat state' in the citrus canker outbreak and major pest incursion responses such as papaya fruit fly and the red imported fire ant.

As combat state, Queensland has been responsible for developing implementation plans within the national framework, and for implementing the agreed outcomes of the national decision-making process.

Many of the specific difficulties faced during the citrus canker eradication program can be overcome through the implementation of the Emergency Plant Pest Response Deed (the Deed). In particular, certain opposition by industry (collectively and at an individual grower level) to many of the decisions faced by the CCEPP and the NMG is likely to be addressed largely by the implementation of Owner Reimbursement Costs under the Deed.

Some of the other specific issues associated with plant pest incursions will require longer term solutions such as education and communication strategies to overcome lack of knowledge and understanding of policy implications for trade, biosecurity, and risk.

7.1 The Threat of Incursion –Illegal importation and natural spread

7.1.1 Responsibility

'Prevention is better than cure'. The prevention of high risk imports has to remain the first line of defence against exotic plant pest incursions. This must remain a Commonwealth responsibility to ensure that protection is appropriate to risk level. It must be recognised however, that even the most stringent quarantine measures will not prevent the ingenious or determined from breaching quarantine. Nevertheless, the role of natural incursion or spread cannot be ignored, highlighting the need for targeted surveillance for exotic plant pests.

Early detection is essential to maximise the chances of eradication and minimise the impacts of incursion. While state and territory agencies have specific roles and responsibilities in surveillance, the greatest capacity for surveillance exists within the group that is constantly in contact with crops and therefore most likely to make the earliest possible detection – the growers themselves.

In order to maximise the advantage presented by the constant surveillance undertaken by growers, these growers need to be effectively and consistently skilled. Through the Deed development process, each partner industry has listed its highest priority exotic plant pests. Government and industry associations need to focus on training growers to recognise those specific pests, but also to provide generic pest identification and surveillance capacity.

Animal Health Australia has been leading the way in emergency response training, incorporating education and training programs for industry that will help to deliver a better understanding within industry and a more united approach to biosecurity.

DPI&F has pursued this approach in partnership with Growcom as a consequence of the citrus canker incursion, and this model could be used in other horticultural industries. This process has guided growers in the development and implementation of on-farm biosecurity plans, while also adding to the general education and awareness of this sector.

The principles of the Deed are critical in encouraging growers to look and report. Those who do detect and report must be left in no worse position than they were, prior to detection. There also needs to be greater recognition by the industry itself of those who do look, find and report – after all, these early detections will potentially save the rest of the industry millions in pest management costs and lost market opportunities. A more 'collegiate' mentality must be encouraged in plant industries, rather than the current culture in which the misfortune of one grower or area suffering from a new pest is commonly regarded as presenting a market advantage for those who do not suffer from the incursion.

7.1.2 Risk

The issue of distinguishing perceived risk from actual (or scientifically assessed) risk is an important area of interpretation that the policy makers and communications staff have not been able to address in the citrus canker response.

There is a great deal of community confusion between established scientific risk and perceptions of risk that drive a 'zero' tolerance policy. Generally speaking it is easier for those with limited understanding of all facets of risk to focus on the specific risks highlighted by a pest-risk analysis of proposed trade than to appreciate the ever-present level of background risk of, for example, general tourist and trade traffic.

The limited understanding of risk-analysis outcomes and cost-benefit outcomes in Australia has serious implications for both quarantine and agricultural biosecurity policy. All stakeholders need to have a broad understanding of the principles of risk to assist with decision-making at a domestic and international level.

The way risk analysis is communicated to government, industry and community can make a significant difference to the perceived level of risk and therefore to the acceptable level of risk adopted. Communicating the concepts of risk in a readily-understood way is the only way to minimise the 'fear factor', which no amount of scientific explanation will overcome.

Acceptable level of risk (or Appropriate Level of Protection – ALOP) is a concept that cannot be easily defined in quantitative terms. What is 'acceptable' varies widely according to the individual situation. There is a common expectation in the community that only 'zero' risk is acceptable.

Industries and individual growers are most commonly exposed to the risk analysis process and its outcomes through import proposals with all of the attendant market access implications. They, therefore, associate risk analysis with some level of

possible 'threat', rather than regarding it as a means of identifying the safest and most appropriate way of continuing to do business.

Analysis of the pre-emptive destruction proposal from industry during the canker response demonstrated the need for improved communication and understanding of risk analysis outcomes and cost-benefit outcomes.

Similar options relating to pre-emptive destruction exist under the Emergency Animal Disease Response Agreement (EADRA), but this agreement clearly provides for compensation/financial incentives to make that option more acceptable. Such an agreement was not in place during this outbreak of canker.

Industry groups may not have been so supportive of pre-emptive destruction at such an early stage if they were responsible for sharing a proportion of national eradication program costs. As judicious investors of their members' funds, they would have been keen to ensure that pre-emptive destruction was the most efficient and effective investment they could make under those circumstances. The science-based risk process adopted at the time would therefore most probably have been attractive to all funding partners.

The inclusion of an industry cost share for eradication programs under the Deed will encourage all decisions to be based on the technical and economic feasibility of eradication. This will remove the opportunity for any party to demand a solution that does not take into account the cost-benefit aspects of the eradication program.

7.1.3 Reason for illegal importation

Legal import requirements for genetic material for plant industries are currently stringent and there is potential for the level of control placed on legal importation process to encourage attempts to circumvent these requirements.

Legal importation of risk material (e.g. new plant varieties) is a very expensive and time-consuming exercise. The Radcliffe Review recently recommended even tighter controls for research importations, which are regularly the basis for improved, locally developed varieties.

The limited investment in Australian plant breeding programs, and/or the limited outcomes from those programs, has resulted in an almost complete reliance upon imported varietal material to gain market advantage. This is particularly the case in the tree fruit and other perennial horticulture sectors compared with the large unified national industries, such as grains. This reflects a range of factors, such as the time taken to develop new varieties, the juvenile period of many perennial crops, and the fact that Australia is usually a minor player on the international stage in these crops.

As expansion or improvement of Australia's horticultural market position is largely dependant upon the ability to successfully target export markets, there is a strong drive to secure crop varieties that are perceived as meeting those market specifications.

7.2 Compensation

There have been claims by interested parties that compensation has not been paid to affected Emerald citrus growers because of Queensland legislative provisions. In fact, the reasons for the non-payment of compensation are:

- All citrus trees destroyed (prior to those to be destroyed under the NMG resolutions of 3 June 05) have been infested or deemed to be infested and therefore are not legally regarded as healthy trees.
- NMG resolutions have not provided for any level of compensation or owner reimbursement. As the 'combat state' in a nationally-determined eradication program, Queensland is required to implement the resolutions of NMG within the scope of the framework provided by NMG.

Queensland recognises the risk that growers may be reluctant to report possible exotic pest incursions, because of the lack of compensation and the significant impacts on individual growers as demonstrated during the citrus canker response. Ratification of the Deed will help negate a large part of this reticence by individuals to report suspected outbreaks upon detection.

Industry needs to recognise that those who do report suspect emergency pest incursions are potentially committing to great personal sacrifice (economic and emotional) for the wider benefit of the industry as a whole. While the principles of the Deed state that no individual should be 'better nor worse off', the protection that these early-reporters provide to the rest of industry should be recognised in some demonstrable way.

During a pest incursion response, the lack of compensation for plants and crops destroyed is a source of contention, and detracts industry focus from the scientific-based reasoning that justifies the response. In fact, the compensation issue has been the single biggest source of distraction during the citrus canker response and has therefore hindered the efficacy of the emergency response and eradication program. Many hours, amounting to many dollars are expended in responding to and justifying the compensation policy. Industry will continue to seek outcomes that minimise the impact on them until compensation is in place. These outcomes may diverge from those necessary to most effectively and efficiently ensure eradication.

While the Deed has the potential to go a large way to overcoming the issue of direct compensation, the issue of expectation for losses remains. This is exemplified in the current case with the inability to effect commercial turn-off of citrus fruit from destroyed properties for several years. It is unsustainable to any cost-sharing arrangement to enter into provision of consequential loss compensation.

7.3 Capacity

7.3.1 Diagnostics/sampling

During the citrus canker response, it was observed that there were delays in obtaining diagnostics. This raises the issue of Australia's capacity to undertake rapid testing and therefore implement emergency disease/pest responses.

Major issues are:

- the capacity to rapidly implement and scale-up diagnostic testing, particularly given that the diagnostics will be for unfamiliar/irregular pests
- protocols that ensure appropriate access to testing capacity, regardless of jurisdiction or agency cross-overs, do not exist
- ensuring well-established standards (generally and for the specific diagnostic tests being implemented) are developed and adopted
- ensuring a multi-stage approach to diagnostics wherever possible, to reduce the potential for routine/non-suspect samples to 'clog' the critical diagnostic system elements
- appropriate tracking mechanisms from point-of-sampling to release of diagnostic result
- establishing a diagnostics reference panel to deliberate on unresolved diagnostic outcomes, and to oversee the integrity of the diagnostic process.

7.3.2 Resources

An emergency response places a significant resource burden on the lead agency or combat state, specifically in terms of limiting capacity to deal with other emerging issues. This is due to the limited number of technical staff available for employment at any point in time.

Development of Base Performance Standards (i.e. core capacity desirable in all Deed partners, including industry) is progressing in both animal and plant emergency response situations. This will help establish core responsibilities and identify critical gaps that will need to be supplemented during a response.

7.3.3 National process

Queensland's observation of the national decision-making process for the citrus canker response, has been that it has facilitated a timely response and enhanced the national management capacity for emergency responses. It has also enabled policy decisions to be made on a fully informed scientific basis, with technical groups such as the Scientific Advisory Group feeding into the CCEPP, and subsequently to the NMG.

Queensland supports the national direction of having a common overall approach to emergency response across animal and plant biosecurity, which is based on the Emergency Management Australia model. The ability of this State to respond to the detection of citrus canker was assisted by its generic whole-of-government response planning for an agricultural biosecurity emergency, originally built around the threat of foot-and-mouth disease.

The citrus canker incursion response benefited greatly from having the draft contingency plan in place, developed jointly by government and industry. Not only did this provide the basis for immediate action without having to research and debate the

merits of particular courses of action before these actions could be implemented, it also gave some level of surety regarding the actions that would be taken.

However, on the occasions it was necessary to depart from the contingency plan, it was difficult for some parties to understand why the departure was required. Various industry parties (particularly Emerald growers) often complained that the contingency plan was 'still a draft', and asked when it was going to be finalised. This reflects the desire of those most affected by an incursion to have the greatest degree of certainty possible.

While the existence of contingency plans will always benefit rapid and rational response to an incursion, it must be recognised that pest incursions are within a biological system that will always have peculiarities unique from one time or place to the next. Therefore, there will always be a need to modify a contingency plan at some stage during every incursion response.

It follows that, rather than being detailed and prescriptive (and thereby building false expectation among the parties involved), incursion contingency plans should establish broad principles that can be applied. It is also imperative that these principles are agreed to by all parties in advance. Whenever a departure from those principles is required, it is critical to the ongoing support of the national bodies that these variations are properly communicated and understood by all parties.

The citrus canker incursion response is also the first time that the Deed principles and processes were generally (but not completely) adopted. This included the application of PLANTPLAN as the response planning and management framework. As with any process template or framework, the first application will identify a range of critical gaps and issues. These have been identified by the various parties at different stages, and are being incorporated by Plant Health Australia in the current review and redraft of PLANTPLAN.

The roles of the various components of the National process are detailed in PLANTPLAN, but should also be recognised in simple terms. SAG is required to deliberate only on the scientific merits of any actions. The CCEPP must decide on the strategic science and implementation approach. That is, what approach is justifiable on a scientifically feasible and rational basis? NMG operates at a policy level, taking the recommendations from CCEPP and marrying these with national quarantine and incursion response policy. This process provides the ability to base policy decisions on the prevailing scientific expertise, leading to fully-informed decision making.

The current national response process does facilitate an effective and timely response from a scientific/biological perspective. It allows for rapid decision making based on established principles, with the main decision-makers (Chief Plant Health Managers and Chief Executives) who are experienced in making significant decisions at short notice.

Whether this capacity for rapid, rational decision making will persist with greater industry involvement through the Deed remains to be seen. Industry representatives who participate in this decision-making process will need to have the willingness and

authority to make decisions on behalf of industry without resorting to lengthy consultation processes. Training and capacity building will also need to target industry partners of the Deed to address this issue.

Comments from the citrus industry indicate a perception that many of the decision-makers in this incursion response have been somewhat removed from the real impact of their decisions, and have not taken the opportunity to become better acquainted with the operational environment into which their decisions were being delivered. Any changes to the national response structure and process should take this into account, as a means of engendering a greater sense of understanding and appreciation by the decision-makers of the impact of their decisions.

7.4 Communication

Communication strategies under the citrus canker incursion response and eradication processes were implemented largely in accordance with the communication principles laid out in PLANTPLAN. This was particularly the case during the emergency response phase, where general and industry-specific communications were conducted under the principles established by the National Emergency Response Communications Network.

Industry has indicated that they have been very satisfied with the communication processes implemented, through the level of contact and availability of key staff and through the regular distribution of the 'Citrus Canker Updates'.

One of Queensland's citrus canker debrief/response learning processes has been to engage industry through the Biosecurity Advisory Council of Queensland (BACQ), that established a working group to review industry's perspectives on communications and liaison.

Among the recommendations of this Working Group is that an Industry Liaison Team be established to ensure local industry has a 'point of entry' into the national decision making process, and that mechanisms be developed to allow for communication with industry bodies on the deliberations and outcomes of CCEPP and NMG processes without compromising the requisite confidentiality.

As with many aspects of managing the response to citrus canker, the absence of a mechanism to deal with owner reimbursement or compensation has been a significant focus for communication activities, particularly in the latter stages. This has diverted much of the industry communication effort towards lobbying for resolution of this, while diverting much of the 'combat state' and other jurisdictional communication focus towards defending the decisions made regarding the non-payment of compensation.

There are several other major impediments to effective communication which were experienced by Queensland as 'combat state' during the citrus canker emergency response and ongoing eradication program. These included:

- complicated processes that are too difficult to explain in the popular media. This particularly relates to risk analysis as the basis for decisions, market

access restrictions and the science behind the eradication strategies developed and implemented

- the lack of understanding of the perceived risk versus the actual risk, especially by industry
- the lack of industry and wider community understanding of the processes and mechanism's in place to respond to pest and disease risks and outbreaks

In many emergencies affecting the wider community, a more cohesive community response is in place that works to overcome the adversity. A degree of self-interest from all sections of the citrus industry overshadowed the targeted 'greater good' response to the citrus canker eradication program. From a communications perspective this is particularly challenging, adding many extra dimensions to media management. A number of the industry groups and individuals hired professional media consultants to assist in promoting their own interests and lobbying for their own views. These all had to be handled under the auspices of the eradication program. This is outside the scope the communication sections in the current PLANTPLAN and requires a flexibility that is difficult to prescribe.

Considerable thought and planning should be given to a communication strategy that has a large education and training component that ensures a broader understanding of the government role and industry expectations and enhances Australia's ability to manage pest and disease risk.

Consideration should also be given to the reasonable apportionment of the media management and response effort required throughout an incursion. Making the 'combat state' responsible for all media dealings is not sustainable, as it adds considerable pressure to the agency that is already likely to be stretched in their efforts to implement the eradication program.

It is recommended that the 'combat state' take responsibility for media management in relation to operational and delivery aspects of the eradication program, but not have to also be the only voice on decisions taken and directions set through the national framework. This strategy was actually proposed by the Chair of NMG at an early stage of the citrus canker incursion response. However, as the eradication program moved on and some of the decisions and directions started to meet with considerable opposition, the Commonwealth determined that Queensland (as 'combat state') should manage all media enquiries and responses.

In terms of the communication responsibilities of industry, industry groups need to become constructive mediators between individuals and decision-making bodies. It would also be beneficial to have an agreed process whereby industry representatives on these groups can effectively report back to their members on the outcomes of decision-making group deliberations without compromising the need for the confidentiality of those deliberations.

Ensuring that affected individuals and businesses have a clear understanding of the current and future decisions of the eradication authorities and the implications of these decisions is an area of critical need throughout an eradication program. Response authorities need to build-in greater emphasis on relationship management

to deal specifically with affected individuals, parties and industries in a response situation. Establishing a Relationships Manager position would help to deal specifically with affected parties/industries in a response situation.