



# Department of Environment and Primary Industries

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## Potato Cyst Nematode Risk Based Model Discussion Paper

This paper provides summary information about a Risk Based Model (RBM) for managing the risks associated with spreading Potato Cyst Nematode (PCN) within Australia.

The RBM was developed by DPI Victoria because of concerns about lack of progress in adopting the National PCN Management Plan (NMP). The RBM incorporates the key risk elements and mitigation measures described in the NMP. Victoria presented a paper on the RBM to Plant Health Committee of commonwealth, state and territory chief regulators in Hobart on 7-9 November 2012. PHC members (except NSW who was absent) provided 'in principle' support for the RBM. However, they are to provide final endorsement of the proposal by 14 February 2013.

Victoria believes that current certification requirements imposed by other jurisdictions are not technically justified. Notably these requirements impose restrictions on all lands within 20km of a known infested property, including those that have no link to the infested property. This is done despite linked lands in other jurisdictions (that is having received and planted potentially infested seed potatoes) not being subject to similar requirements.

If jurisdictions believe the risk posed by potatoes from non-linked lands within 20km of an infested property to be of a level that justifies current quarantine restrictions, then a consistent approach would have to apply and similar requirements applied to linked lands in other jurisdictions. Either evidence of PCN testing to demonstrate ongoing state freedom would be required or consignments of host material from within 20km of each of those linked lands should be provided, consistent with the requirements imposed on Victoria.

### Key Elements of the National PCN Management Plan (2012)

A 'Final Plan' version of the NMP has been posted on the AUSVEG website since June 2012. The NMP identifies the major risks for introducing PCN to un-infested land as being through the movement of vectors (potatoes, nursery stock, root vegetables, used machinery and equipment) from infested and linked land and use of untested potato tubers as seed.

The NMP proposes continued government regulation of infested and linked land usage as well as movement of PCN vectors off such land. It includes mandatory PCN soil testing for all potato seed sold for planting and industry adherence to PCN Farm Hygiene Code of Practice.

Significantly the NMP also proposes management of PCN on a property by property basis (depending on its PCN status) as opposed to the current model of controlling host movement from all potato properties within 20km of a PCN infestation. Under the NMP all land used for potato production is categorised as either:

1. PCN infested land
2. Linked land
3. Land used for potato seed production
4. De-linked land
5. Non-linked land of indeterminate status

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Each category has associated treatment, surveillance and movement conditions designed to manage the biosecurity risk. Movement of PCN vectors from category 1 land are strictly controlled. Vectors from categories 2-3 (very high – medium risk) land require treatment, soil testing and certification. PCN vectors moving from de-linked and non-linked land of indeterminate status (categories 4-5) are defined as medium risk and require soil testing to validate area or property freedom.

A combination of criteria can reduce the land status risk of de-linked and non-linked land of indeterminate status to low or very low: these include land with a history of negative soil testing; planted with PCN resistant cultivars; planted with certified PCN free seed only; subject to low intensity rotations; virgin land; and covered by PCN freedom supported by surveillance data

The implementation of the NMP is likely to result in significant costs and regulatory burden on land owners within potato production districts of NSW, QLD and SA due to land in these districts being defined as linked, delinked or non-linked land of indeterminate status and therefore require testing to validate PCN freedom.

### Why the Risk Based Model?

The RBM is based on the premise that outbreaks of PCN are thoroughly delimited in the district and legislated property controls are operational. The RBM manages the key risk, as described in the NMP, but at reduced regulatory cost to producers, marketers and governments. Its aim is to contain and control PCN within Australia rather than to eradicate the pest, as is the objective of the NMP. Given overseas experience and the current distribution of PCN it would be extremely difficult, at best, to eradicate from both a technical and economic perspective.

The RBM divides up responsibility for PCN management:

- Government would regulate, where practical, the very high – high risks, including:
  - Land use practices and movement of PCN vectors from infested and linked land
  - Require all imported seed to be certified or meet the conditions of the Australian National Standard Certification of Seed Potatoes.
- Industry would manage the medium-very low risks, including:
  - Movement PCN vectors from non-infested and non-linked land
  - On farm biosecurity

The specific conditions of the RBM are:

- Current treatment/certification arrangements and prohibitions would be maintained for linked and infested land in accordance with model legislation detailed in Model Legislation (attachment 2 of the VIC RBRRM Model Legislation – Summary).
- Movement conditions on PCN vectors from non-infested and non-linked land within a 20km control area would be removed.
- Interstate vector movements and land use practice of known infested and linked land would continue to be regulated.
- Continued recognition of current state/territory PCN freedom status (this differs from the NMP which requires testing to prove freedom)
- Potato seed certified in accordance with the *Australian National Standard Certification of Seed Potatoes* to be allowed unrestricted market access
- Industry implementation of the *PCN Farm Hygiene Code of Practice*

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The RBM acknowledges the following:

- The PCN status of Victoria's potato production districts is well known through extensive soil testing since 1991. Over 20,000 soil samples have been taken as part of interstate quarantine and certified seed requirements.
- PCN is restricted in its capacity for natural movement.
- The critical risks as identified in the NMP will continue to be regulated in Victoria.
- Current interstate restrictions on Victorian grown potatoes and PCN vectors are inconsistent with WTO Application of Sanitary and Phytosanitary Measures and COAG Intergovernmental Biosecurity agreements.
- 20 km control areas around infested properties include the vast majority of localised potato properties, which are not in any way linked to the affected land. The perpetuation of such control areas, despite exhaustive testing to provide property free certification, imposes significant additional costs to property owners.
- Potentially infested potatoes from Victorian land, subsequently shown to be infested, have been planted on properties interstate making these properties potentially linked.
- Importance of maintaining the international perception that PCN infestation are confined to Victoria

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