



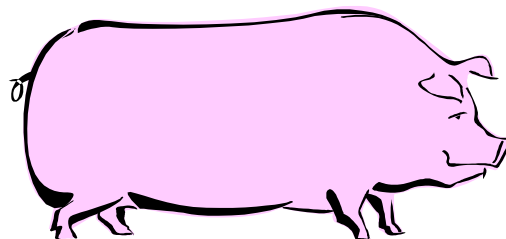
**Australian Government**

**Department of Agriculture, Fisheries and Forestry**

# Generic Import Risk Analysis (IRA) for Pig Meat

*Final Import Risk Analysis Report*

Executive Summary  
and  
Quarantine Requirements for  
Importation of Pig Meat



February 2004



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## EXECUTIVE SUMMARY

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This *Final Import Risk Analysis (IRA) Report* describes the procedures followed to identify and assess the quarantine risks associated with imports to Australia of pig meat. It presents recommendations in relation to quarantine measures sufficient to ensure that Australia's appropriate level of protection (ALOP) is maintained.

This report contains the following:

- information on the background to this IRA, Australia's framework for quarantine policy and IRAs, the international framework for trade in animals and animal products, and Australia's current policy for importation of pig meat;
- an outline of the methodology and results of hazard identification, risk assessment and risk management;
- quarantine import conditions for pig meat;
- further steps in the IRA process; and
- a summary of stakeholder comments received on the *Technical Issues Paper, Draft Methods Paper* and *Draft IRA Report* and Biosecurity Australia's and the Panel's response.

In accordance with the process established by Biosecurity Australia for conducting IRAs as outlined in the *Import Risk Analysis Handbook* the *Final IRA Report* will be open to appeal for a period of 30 days after its release.

If there are no appeals, appeals are dismissed or once the identified deficiencies arising from any successful appeals are addressed, the recommended policy is submitted to the Director of Animal and Plant Quarantine for determination. Once the Director makes the final determination, the Australian Quarantine and Inspection Service (AQIS) is advised of the new policy and is responsible for its implementation.

### Background

This IRA commenced in May 1998. The IRA is 'generic' in that it is not restricted to specific exporting countries; the import conditions recommended as a result of the IRA are applicable to any country provided that they can be met to the satisfaction of Australian authorities. The *Final IRA Report* examines the risks attributed to all disease agents of quarantine concern that may be introduced into Australia through the importation of pig meat.

For this IRA, the definition of 'pig meat' is limited to porcine muscle tissue, blood confined to muscle vasculature, bone and bone marrow, and any other tissues (for example, lymph nodes, skin, nerves) that may be considered inseparable from muscle. *Inter alia*, this approach means that the issues associated with the introduction of disease agents as a result of the importation of 'pig meat products' derived from offal, blood, bone or neurological tissue (such as brain, spinal cord) are not considered.

The IRA provides the basis for response to access requests for pig meat from Brazil, Canada, Chile, European Union (EU) Member States, Hungary, Korea, Mexico, New Zealand, South Africa, Taiwan and the United States of America (USA).

A risk analysis panel (the Panel) was established in 1999. The members are:

Dr David Banks      General Manager, Animal Biosecurity, Biosecurity Australia  
(*Chair*)

Dr Robyn Martin    Manager, Animal Biosecurity, Biosecurity Australia  
(*Secretariat*)

Dr Kevin Doyle     Veterinary Director, National Office, Australian Veterinary  
Association

Dr Ross Cutler      Consultant Specialist Veterinarian

Prof. Colin Wilks    Consultant Microbiologist

The Panel established two technical working groups for porcine reproductive and respiratory syndrome (PRRS) and post-weaning multi-systemic wasting syndrome (PMWS) to assist in its consideration of these diseases.

### **Current import policy for pig meat**

Under current policy, uncanned, uncooked pig meat may be imported from the South Island of New Zealand, Canada and Denmark. Pig meat from Canada and Denmark must, however, be imported deboned and be cooked on arrival in Australia in order to address the quarantine risk associated with the potential presence of the disease agent PRRS virus which does not occur in Australia. Pig meat cooked in Canada prior to export is also permitted. Imports of pig meat increased for the 12 months to November 2003 to \$192 million. Canada supplies approximately 60 per cent by volume and Denmark 35 per cent, and together these nations account for 95 per cent of pig meat imports, the balance is from New Zealand and canned pig meat imports from various countries.

Pig meat may be imported from any country if the meat is canned (sealed container) and all portions of the contents have been heated to at least 100°C.

Further details of the current import requirements for pig meat are available at the ICON website <http://www.aqis.gov.au/icon>.

### **Hazard identification**

A *Technical Issues Paper* was released on 8 January 2001 and a public meeting to discuss the paper was held in Canberra on 1 March 2001. The issues paper identified 28 disease agents for further consideration. These were:

- Foot-and-mouth disease virus
- Vesicular stomatitis virus
- African swine fever virus
- Classical swine fever virus
- Rinderpest virus
- Swine vesicular disease virus
- Aujeszky's disease virus
- Porcine reproductive and respiratory syndrome virus
- Transmissible gastroenteritis virus

- Trichinellosis (*Trichinella spiralis*)
- Cysticercosis (*Cysticercus cellulosae*)
- Nipah virus
- Post-weaning multisystemic wasting syndrome
- Salmonellosis (*Salmonella typhimurium* DT104)
- Swine influenza virus
- Porcine brucellosis (*Brucella suis*)
- Porcine epidemic diarrhoea virus
- Porcine respiratory coronavirus
- Rubulavirus (Mexican blue eye disease)
- Eperythrozoonosis (*Eperythrozoon suis*)
- Teschen disease (Enterovirus encephalomyelitis virus)
- Rabies virus
- Bovine tuberculosis (*Mycobacterium bovis*)
- Haemorrhagic septicaemia (*Pasteurella multocida*)
- Japanese encephalitis virus
- Surra (*Trypanosoma evansi*)
- Venezuelan, Eastern and Western equine encephalomyelitis
- Vesicular exanthema virus

Several responses were received on the *Technical Issues Paper*. Stakeholder comments were taken into consideration in preparing the *Draft* and *Final IRA Reports*.

Subsequently, it was decided not to consider two diseases. These were Eperythrozoonosis (*Eperythrozoon suis*) and vesicular exanthema virus. The first has been diagnosed in Australia and the second is no longer present in any country. The *Final IRA Report* recommends that exporting countries certify country freedom for vesicular exanthema. Accordingly 26 disease agents were identified of quarantine concern and were the focus of individual risk assessments.

## **Method for Import Risk Analysis**

On 1 October 2002, Biosecurity Australia released a *Draft Methods Paper* that set out the approach to the method for undertaking the risk analysis. It outlined the release and exposure pathways, and the outbreak scenarios considered to be of importance in assessing the risk associated with importation of pig meat. The paper identified the major exposure pathways for disease introduction through waste from households and waste from food service establishments. Four groups of animals that may be directly exposed to uncooked pig meat scraps were identified and included feral pigs, backyard pigs, pigs in small commercial enterprises and susceptible species that will eat meat, i.e. dogs, cats and rodents. The IRA also examines the consequences of spread to large commercial piggeries and other animals such as horses and cattle although this is not considered a pathway for direct exposure. This IRA does not directly examine the public health risks to humans associated with the direct consumption of imported pig meat. Products intended for human consumption may undergo a separate risk assessment by Food Standards Australia New Zealand (FSANZ). The Australian Government Department of Health and Ageing has been consulted on the assessments for zoonotic pests or

diseases that may establish in Australia's animal population through the importation of pig meat.

Several stakeholders commented on the *Draft Methods Paper*. Those submissions were also considered in preparing the *Draft* and *Final IRA Reports*.

## Draft Import Risk Analysis Report

The *Draft IRA Report* was released on 12 August 2003 and three public meetings were held (Bendigo, Young, Toowoomba) to discuss the paper during the 60 day comment period. At those meetings the requirements for PMWS related to processing were clarified to the effect that processing could take place on-shore under quarantine control or off-shore. Several responses were received on the *Draft IRA Report* and these comments were taken into account in preparing the *Final IRA Report*.

## Assessment and management of risk

Risk management describes the process of identifying and implementing measures to mitigate risks so as to achieve Australia's ALOP, while ensuring that any negative effects on trade are minimised.

The unrestricted risk<sup>1</sup> of entry, establishment and/or spread was assessed for each disease agent of quarantine concern. In relation to the following disease agents the unrestricted risk of entry, establishment and/or spread was assessed as being too high to meet Australia's ALOP:

- Foot-and-mouth disease virus
- African swine fever virus
- Classical swine fever virus
- Rinderpest virus
- Swine vesicular disease virus
- Aujeszky's disease virus
- Porcine reproductive and respiratory syndrome virus
- Trichinellosis (*Trichinella spiralis*)
- Nipah virus
- Post-weaning multisystemic wasting syndrome

For all other disease agents, the unrestricted risk was assessed as being sufficiently low to meet Australia's ALOP.

In the case of *Trichinella spiralis*, Nipah virus, *Salmonella typhimurium* DT104 and *Brucella suis* the Australian Government Department of Health and Ageing has advised Biosecurity Australia that risk management measures would be required to address human health concerns which would arise should these diseases enter and establish or spread in the Australian animal population.

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<sup>1</sup> Unrestricted risk estimates are those derived in the absence of specific risk management measures, or using only internationally accepted baseline risk management strategies. In contrast, restricted or mitigated risk estimates are those derived when 'risk management' is applied. In the case of this *Final IRA Report*, unrestricted risk is the risk associated with pig meat produced according to the relevant Australian Standards, in particular Australia's domestic requirements for ante-mortem, slaughter and post-mortem procedures for the production of meat for human consumption.



## **Summary of risk management measures**

### **Foot-and-mouth disease virus**

Country or zone freedom without vaccination, or canning of pig meat such that all portions have been heated to at least 100°C (shelf stable), would meet Australia's ALOP.

### **African swine fever (ASF) virus**

Processing of pig meat by dry curing under specified conditions for Parma type hams (minimum curing time 399 days), Iberian type hams, loins or shoulders and Serrano type hams (minimum curing time 140 days), together with certification that the pigs had been sourced from premises which had been free from evidence of ASF infection for the 3 months prior to slaughter would reduce the risk of entry, establishment and/or spread of ASF virus to very low, which would meet Australia's ALOP.

Country or zone freedom, or canning of pig meat such that all portions have been heated to at least 100°C (shelf stable), would also meet Australia's ALOP.

### **Classical swine fever (CSF) virus**

Processing of pig meat by dry curing under specified conditions for Parma type hams (minimum curing time 313 days), Iberian type hams, loins or shoulders and Serrano type hams (minimum curing time 252 days), together with certification that the pigs had been sourced from premises which had been free from evidence of CSF infection for the 3 months prior to slaughter would reduce the risk of entry, establishment and/or spread of CSF virus to very low, which would meet Australia's ALOP.

Country or zone freedom, or canning of pig meat such that all portions have been heated to at least 100°C (shelf stable), would also meet Australia's ALOP.

### **Rinderpest virus**

Country or zone freedom, or canning of pig meat such that all portions have been heated to at least 100°C (shelf stable), would meet Australia's ALOP.

### **Swine vesicular disease (SVD) virus**

Processing of pig meat by dry curing under specified conditions for Parma type hams (minimum curing time 360 days), together with certification that the pigs from which the meat was derived were sourced from herds serologically tested negative using either virus neutralisation or ELISA within the 6 months prior to slaughter and within the 6 months following slaughter would reduce the risk of entry, establishment and/or spread of SVD virus to very low, which would meet Australia's ALOP

Country or zone freedom, or canning of pig meat such that all portions have been heated to at least 100°C (shelf stable), would meet Australia's ALOP.

### **Aujeszky's disease virus**

Removing the head and neck from the carcass would reduce the risk of entry, establishment and/or spread of Aujeszky's disease virus to very low, which would meet Australia's ALOP.

Deboning and processing (cooking or curing) of pig meat would reduce the risk of entry, establishment and/or spread of Aujeszky's disease to negligible, which would meet Australia's ALOP.

Country or zone freedom or canning of pig meat such that all portions have been heated to at least 100°C (shelf stable), would also meet Australia's ALOP.

### **Porcine reproductive and respiratory syndrome (PRRS) virus**

Cooking of pig meat with or without bone to a minimum core temperature of 70°C for 11 minutes or dry curing pig meat under specified conditions for Parma type hams (minimum curing time 313 days), Iberian type hams, loins or shoulders and Serrano type hams (minimum curing time 140 days) would reduce the risk of entry, establishment and/or spread of PRRS virus to very low, which would meet Australia's ALOP. Imported pig meat may be cooked off-shore or in Australia on-shore provided that the latter occurs within the urban area of the port into which it is imported or if in a rural area is transported under appropriate secure arrangements (e.g. refrigerated container) by the most direct route from the nearest port of entry.

Country or zone freedom or canning of pig meat such that all portions have been heated to at least 100°C (shelf stable) would also meet Australia's ALOP.

### ***Trichinella spiralis***

Testing each carcass for *Trichinella* larvae, or processing of pig meat by cooking or freezing at temperatures to destroy larvae, or dry curing of pig meat under specified conditions for Parma type hams (minimum curing time 313 days), Iberian type hams, loins or shoulders and Serrano type hams (minimum curing time 140 days) would reduce the risk of entry, establishment and/or spread of *Trichinella spiralis* to very low (testing) or negligible (processing), which would meet Australia's ALOP.

Country or zone freedom in domestic pigs, or canning of pig meat such that all portions have been heated to at least 100°C (shelf stable), would also meet Australia's ALOP.

The Department of Health and Ageing has advised Biosecurity Australia that biosecurity measures would be required to manage the risk to human health associated with the importation of pig meat should the disease enter and establish or spread in the Australian animal population. Appropriate measures would include testing of carcasses or processing (cooking, curing, freezing), or herd or zone freedom.

### **Nipah virus**

Country or zone freedom in domestic pigs, or canning of pig meat such that all portions have been heated to at least 100°C (shelf stable), would meet Australia's ALOP.

The Department of Health and Ageing has advised Biosecurity Australia that biosecurity measures would be required to manage the risk to human health associated with the importation of pig meat should the disease enter and establish or spread in the Australian animal population. Appropriate measures for a country or zone which has reported Nipah virus would include certification that the pigs from which the pig meat was derived originate from a herd which has been tested negative for the disease agent or canning of pig meat such that all portions have been heated to at least 100°C (shelf stable).

## **Post-weaning multisystemic wasting syndrome (PMWS)**

Removing the head and neck and major peripheral lymph nodes and deboning, together with processing of pig meat (cooking or curing), would reduce the risk of entry, establishment and/or spread of PMWS to very low, which would meet Australia's ALOP. Imported pig meat may be cooked off-shore or in Australia on-shore provided that the latter occurs within the urban area of the port into which it is imported or if in a rural area is transported under appropriate secure arrangements (e.g. refrigerated container) by the most direct route from the nearest port of entry. Removal of the head and neck, major peripheral lymph nodes and bone must occur prior to export of pig meat to Australia for processing.

Country or zone freedom or canning of pig meat such that all portions have been heated to at least 100°C (shelf stable) would also meet Australia's ALOP.

## ***Salmonella typhimurium* DT104**

The Department of Health and Ageing has advised Biosecurity Australia that biosecurity measures would be required to manage the risk to human health associated with the importation of pig meat should the disease enter and establish or spread in the Australian animal population. Appropriate measures would include compliance with the Food Standards Code including testing for *Salmonella*.

## ***Brucella suis***

The Department of Health and Ageing has advised Biosecurity Australia that biosecurity measures would be required to manage the risk to human health associated with the importation of pig meat should the disease enter and establish or spread in the Australian domestic animal population. Appropriate measures for countries where *B. suis* is endemic, in the case of uncooked pig meat (not subject to further processing in Australia, prior to retail sale), would be to require that the pigs from which the meat is derived be sourced from herds which have been tested negative, or are accredited free from *B. suis*.

## **Conclusion**

This *Final IRA Report* recommends that import of pig meat be permitted subject to certain conditions depending on the health status of the exporting country or zone. Risk management measures include such things as country or zone freedom, testing of the carcass, cooking, freezing, curing, canning and removal of certain tissues or parts of the carcass (removal of the head and neck, major peripheral lymph nodes, deboning). Biosecurity Australia will consider other measures suggested by stakeholders that provide an equivalent level of quarantine protection.



## **QUARANTINE REQUIREMENTS FOR IMPORTATION OF PIG MEAT**

This biosecurity policy is applicable to the importation of pig meat whether uncooked, cooked or cured.

### **1. DOCUMENTATION**

- 1.1 A Permit to Import pig meat into Australia (the Permit includes an Approval Advice for the source establishment), must be obtained in writing from the Director of Animal and Plant Quarantine (Australia) (hereinafter called the Director) prior to export of the first consignment from the approved source establishment.
- 1.2 The application to import must specify the following:
  - the name and address of the importer and exporter and the name and veterinary control number of the approved abattoir and, if applicable, approved cutting-up establishment, approved processing establishment and approved storage establishment in the source country;
  - the cut or cuts (trade description) of the meat/product to be imported;
  - the anticipated port or ports of entry of the pig meat
- 1.3 The application will be assessed on the above criteria as well as any other criterion which is considered relevant by the Director.

### **2. REQUIREMENTS**

- 2.1 Each consignment must be accompanied by official certification in accordance with these requirements and will require, on arrival, a “Quarantine Entry” issued by the Australian Quarantine and Inspection Service (AQIS).
- 2.2 Quarantine entry barrier clearance of each consignment will remain subject to examination of accompanying documentation and sighting by a Quarantine Officer.
- 2.3 The product and consignment details must correspond exactly with documentation and the Permit to Import.
- 2.4 The pigs must be slaughtered and the meat prepared in establishments currently approved by the Director. The standard of construction and facilities of the slaughter establishments, the establishment where the meat was prepared and the establishment where it was stored must meet the Australian Standard for the Hygienic Production and Transportation of meat for Human Consumption, or any standards agreed by AQIS to be equivalent. AQIS may take into account existing approvals granted by the relevant overseas veterinary authorities.
- 2.5 While preparing product for Australia, establishments must conduct slaughter, preparation and storage of the meat in accordance with quality assurance principles such as the HACCP approach.

2.6 The pig meat for export to Australia must comply with AQIS quarantine requirements and other requirements including the Australia New Zealand Food Standards Code.

2.7 Public health requirements (see Annex 4 for requirements of the Department of Health and Ageing)

Imported pig meat must comply with the *Imported Food Control Act 1992* and the *Food Standards Code* developed under *Food Standards Australia New Zealand Act 1991*. Under this legislation, AQIS may inspect, sample, hold and test imported pig meat for microbial agents or residues of public health concern. Additional requirements regarding labelling, packaging and food composition standards must also be complied with. Information on the *Food Standards Code* may be obtained from the Food Standards Australia New Zealand (FSANZ).

2.8 The Quarantine Officer at the port of entry shall note the number of containers which have been off-loaded at the port of call, and their identifying marks and seal numbers.

### 3. CERTIFICATION

3.1 Each consignment must be accompanied by a Veterinary Certificate in accordance with the Office International des Epizooties (OIE) International Animal Health Code 'Model international veterinary certificate for meat of domestic animals' (Appendix 4.2.1. of the Code) signed by an Official Veterinarian. The certificate must provide details of:

- the packaging of the meat including details of the labelling,
- the addresses and veterinary approval numbers of establishments at which the animals from which the meat was derived were slaughtered, the cutting-up establishment at which it was prepared and the establishment at which it was stored prior to export,
- the names and addresses of the exporter and the consignee.

3.2 The Official Veterinarian of the source country must certify in English, under **IV. Attestation of wholesomeness**, that:

- (i) The pigs from which the meat was derived have been continuously resident in the source country since birth and were slaughtered on ..... (dates).
- (ii) The pigs from which the meat was derived passed ante- and post-mortem veterinary inspection under official veterinary supervision; the meat is considered to be fit for human consumption.

(iii) All of the following risk management measures apply:

- a) The pigs from which the meat was derived have been kept since birth in a country or zone which is recognised by Australian authorities as free from foot and mouth disease and have not been vaccinated. **or**

The pig meat has been canned such that all portions of the can contents have been heated to at least 100°C.

- b) The pigs from which the meat was derived have been kept since birth in a country or zone which is recognised by Australian authorities as free from African swine fever (ASF). **or**

The pig meat has been processed by canning such that all portions of the contents have been heated to at least 100°C. **or**

The pigs from which the meat was derived have been sourced from premises which have been free from evidence (clinical, serological, virological) of ASF infection for the 3 months prior to slaughter; **and**, the premises are located in an area where ASF is compulsorily notifiable; **and**, the pig meat has been dry cured<sup>2</sup> under specified conditions for the production of Parma type hams (minimum curing 399 days), Iberian type hams, loins or shoulders, or Serrano type hams (minimum curing 140 days).

- c) The pigs from which the meat was derived have been kept since birth in a country or zone which is recognised by Australian authorities as free of classical swine fever (CSF). **or**

The pig meat has been processed by canning such that all portions of the contents have been heated to at least 100°C. **or**

The pigs from which the meat was derived have been sourced from premises which have been free from evidence (clinical, serological, virological) of CSF infection for the 3 months prior to slaughter; **and**, the premises are located in an area where CSF is compulsorily notifiable; **and**, the pig meat has been dry cured under specified conditions for the production of Parma type hams (minimum curing 313 days), Iberian type hams, loins or shoulders, or Serrano type hams (minimum curing 252 days).

- d) The pigs from which the meat was derived have been kept since birth in a country or zone which is recognised by Australian authorities as free from rinderpest. **or**

The pig meat has been processed by canning such that all portions of the contents have been heated to at least 100°C.

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<sup>2</sup> The full published specifications for Parma hams, Serrano hams, and Iberian hams, loins and shoulders, are available through the institutions responsible for certification of the respective products. They are not reproduced here but the relevant specifications will be part of Australia's certification requirements.

- e) The pigs from which the meat was derived have been kept since birth in a country or zone which is recognised by Australian authorities as free from swine vesicular disease (SVD). **or**

The pig meat has been processed by canning such that all portions of the contents have been heated to at least 100°C. **or**

The pigs from which the meat was derived were sourced from herds serologically tested negative for SVD using either virus neutralisation or ELISA as described in the OIE Manual of Diagnostic Tests and Vaccines within the 6 months prior to slaughter and within the 6 months following slaughter; **and**, the premises are located in an area where SVD is notifiable; **and**, the pig meat has been dry cured under specified conditions for the production of Parma type hams (minimum curing 360 days).

- f) The pigs from which the meat was derived have been kept since birth in a country or zone which is recognised by Australian authorities as free from Aujeszky's disease. **or**

The meat is not derived from the head or neck<sup>3</sup>. **or**

The meat has been deboned<sup>4</sup> and the product is processed (cooked or cured)<sup>5</sup>.

- g) The pigs from which the meat was derived have been kept since birth in a country or zone which is recognised by Australian authorities as free from porcine reproductive and respiratory syndrome (PRRS) and where vaccination is not permitted. **or**

The pig meat has been processed by canning such that all portions of the contents have been heated to at least 100°C. **or**

The pig meat has been dry cured under specified conditions for Parma type hams (minimum curing 313 days), Iberian type hams, loins or shoulders or Serrano type hams (minimum curing 140 days). **or**

The pig meat has been heat processed such that all parts reach a core temperature of at least 70°C for 11 minutes, or equivalent according to the time/temperatures specified in Annex 1 below. **or**

The pigs from which the meat was derived are not from a country or zone recognised by Australia as free from PRRS and the meat has not been processed as specified above.

Note: In this case, the meat must be processed in Australia - see Section 4.

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<sup>3</sup> Meat must not be derived cranial to the fourth cervical vertebrae.

<sup>4</sup> Deboning can occur after product has been cooked or cured.

<sup>5</sup> Processing could occur off-shore or on-shore.



- h) The pigs from which the meat was derived have been kept since birth in a country or zone which is recognised by Australian authorities as free from *Trichinella spiralis*. **or**

Appropriate samples from each pig from which the meat was derived have been tested and found negative for the presence of *Trichinella spiralis* larvae by pepsin digestion or ELISA as described in the OIE Manual of Diagnostic Tests and Vaccines. **or**

The pig meat has been processed by canning such that all portions of the contents have been heated to at least 100°C. **or**

The pig meat has been cooked to one of the time/temperatures specified below (Annex 2)<sup>6</sup>. **or**

The pig meat has been frozen according to one of the time/temperature conditions specified below (Annex 3). **or**

The pig meat has been dry cured under specified condition for Parma type hams (minimum curing 313 days), Iberian type hams, loins or shoulders or Serrano type hams (minimum curing 140 days)<sup>7</sup>.

- i) The pigs from which the meat was derived have been kept since birth in a country or zone which is recognised by Australian authorities as free from Nipah virus. **or**

The pigs from which the meat was derived have been kept since birth in a country or zone in which the domestic pig population is recognised by Australian authorities as free of Nipah virus **or**

The pig meat has been canned such that all portions of the can contents have been heated to at least 100°C.

- j) The pigs from which the meat was derived have been kept since birth in a country or zone which is recognised by Australian authorities as free from post-weaning multisystemic wasting syndrome (PMWS). **or**

The pig meat has been processed by canning such that all portions of the contents have been heated to at least 100°C. **or**

The meat has not been derived from the head or neck<sup>8</sup>, major peripheral lymph nodes have been removed, meat has been deboned<sup>9</sup> and the product is processed (cooked or cured). **or**

The pigs from which the meat was derived are not from a country or zone recognised by Australia as free from PMWS and the meat has not been

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<sup>6</sup> Processing could occur off-shore or on-shore.

<sup>7</sup> Processing could occur off-shore or on-shore.

<sup>8</sup> Meat must not be derived cranial to the fourth cervical vertebrae.

<sup>9</sup> Deboning and removal of major peripheral lymph nodes can occur after product has been cooked or cured.

processed by cooking or curing as above<sup>10</sup>.

Note: In this case, the meat must be processed in Australia - see Section 4.

- k) The pigs from which the meat was derived have been kept since birth in a country or zone which is recognised by Australian authorities as free from vesicular exanthema virus.
  
- (iv) The establishment where the pigs from which the meat was derived were slaughtered, the establishment where the meat was prepared and the establishment where it was stored, have current AQIS approval for facilities and hygienic operation;  
  
Note: The name(s), address(es) and veterinary control number(s) of plant(s) must be specified;
  
- (v) Officials of the *Veterinary Authority* of the source country were present in plants at all times when pigs were being slaughtered for export to Australia.
  
- (vi) The establishment where the meat was prepared did not prepare or process pig meat not eligible for export to Australia while pig meat was being prepared for export to Australia.
  
- (vii) The meat has been prepared for export and packed on ..... (dates), and the bags, wrappers or packing containers were clean and new.
  
- (viii) The identification number of the slaughtering establishment and the establishment where the meat was prepared is readily visible on the meat or, where the meat is wrapped or packed, was marked on the package or wrapping containing the meat, in such a way that the numbers cannot readily be removed without damaging the meat, package or wrapping.
  
- (ix) The meat was not exposed to contamination prior to export.
  
- (x) The meat is being transported to Australia in a clean packing container sealed with a seal bearing the number or mark ..... ; the container contains only meat eligible for entry into Australia.

#### **4. POST-ENTRY CONTROL AND PROCESSING REQUIREMENTS**

Pig meat from countries/zones not recognised as free from PRRS and not processed to ensure inactivation of PRRS virus, as specified in 3.2 (iii) g), may be imported subject to further processing in an establishment that has entered into a compliance agreement with AQIS under a quality assurance arrangement.

Pig meat from countries/zones not recognised as free from PMWS and not processed as specified in 3.2 (iii) j) (cooked or cured), may be imported subject to further processing

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<sup>10</sup> Meat must not be from the head or neck and must be deboned, and major peripheral lymph nodes removed prior to export to Australia for further processing.

in an establishment that has entered into a compliance agreement with AQIS under a quality assurance arrangement.

The following conditions apply.

- 4.1 A copy of the documentation must accompany each consignment of imported pig meat and its derivatives during transport to storage and processing establishments and until it has been adequately processed.
- 4.2 The pig meat and its derivatives must be securely transported from the nearest port of entry to the approved storage establishment(s) thence to the processing establishment(s) within the urban area and finally, with respect to inadequately processed surplus wastes and by-products, to the place(s) of disposal of quarantinable waste. Potentially suitable control systems may include leak-proof packing containers sealed with a numbered, tamper-proof seal at the point of origin for removal and retention at the point of destination. Alternatively, a system based on despatch and receipt weights may be used to accurately account for control of the product. The transport of imported pig meat outside urban areas associated with the Australian port of entry will require appropriate security arrangements to prevent spillage (e.g. refrigerated container) and be transported by the most direct route.

After release from quarantine, the meat must be processed in accordance with the Compliance Agreement prior to distribution for retail sale or consumption. The compliance agreement also covers such things as disposal of packaging, waste water and trimmings.

## **5. REVIEW**

Conditions for importation may be reviewed if there are any changes in the source country's import policy or animal disease status or at any time at the discretion of the Director.

DAVID BANKS  
General Manager  
Animal Biosecurity

**ANNEX 1**

To conform with Australian requirements for inactivation of PRRS virus by heat processing, the minimum core temperatures shown in the following table must be maintained continuously for the minimum times stipulated.

**Inactivation of PRRS virus in pig meat by heating**

<b>Minimum core temperature (°C)</b>	<b>Minimum time (minutes)</b>
56	60
57	55
58	50
59	45
60	40
61	35
62	30
63	25
64	22
65	20
66	17
67	15
68	13
69	12
70	11

## ANNEX 2

To conform with Australian requirements for inactivation of *Trichinella spiralis* in pig meat by heating, the minimum core temperatures shown in the following table must be maintained continuously for the minimum times stipulated.

### Inactivation of *Trichinella spiralis* in pig meat by heating

Minimum core temperature (°C)	Minimum time (minutes)
50.0	570
51.1	270
52.2	120
53.4	60
54.5	30
55.6	15
56.7	6
57.8	3
58.9	2
60.0	1
61.1	1
62.2	Instant

**ANNEX 3**

To conform with Australian requirements for inactivation of *Trichinella spiralis* in pig meat by freezing, the maximum core temperatures shown in the following table must be maintained continuously for the minimum times stipulated.

**Inactivation of *Trichinella spiralis* in pig meat by freezing meat to a specified core temperature**

Maximum core temperature (°C)	Minimum time (hours)
-17.8	106
-20.6	82
-23.3	63
-26.1	48
-28.9	35
-31.7	22
-34.5	8
-37.2	0.5

Alternatively, the meat may be subjected to maximum freezer temperatures according to the table below. The initial meat temperature must not be above 5°C. Group 1 products are those whose minimum thickness is up to 15 cm. Group 2 products are those whose minimum thickness lies between 15 cm and 68 cm. In either case, the product must be packed such that there is free air access between layers.

**Inactivation of *Trichinella spiralis* in pig meat by freezing - freezer temperature**

Freezer temperature (°C)	Group 1 (<= 15 cm thickness) - days	Group 2 (> 15 but <= 68 cm thickness) – days
-15.0	20	30
-23.3	10	20
-28.9	6	12

The Department of Health and Ageing requires additional certification to address human health concerns.

1. In countries where Nipah virus has been reported:

In the case of uncooked meat imported into Australia, the pigs from which the meat is derived originate from herds that have tested negative for Nipah virus.

2. In countries where *Brucella suis* is endemic:

In the case of uncooked meat imported into Australia, the pigs from which the meat is derived originate from herds that have been tested negative or are accredited free from *B. suis*.

3. Processed (cooked, cured) pig meat must comply with the Food Standards Code including testing for *Salmonella*.