1. Introduction

Four import health standards (IHSs) for pig meat, pig meat products and by-products were drafted based on the Import Risk Analysis on Porcine Respiratory and Reproductive Syndrome (PRRS) and released for consultation on 12 November 2007.

- Import Health Standard for Pig Meat and Pig Meat Products for Human Consumption from the European Community
- Import Health Standard for Pig Meat and Pig Meat Products for Human Consumption from Canada and the United States of America
- Import Health Standard for Pig Meat and Pig Meat Products for Human Consumption from the Sonora State of Mexico
- Import Health Standard for Pig By-Products from Canada and the United States of America

The consultation period closed on 15 June 2008. The submissions received were substantial, both in number and content. An extensive review of the submissions has been written. This bridging document serves as a summary of the risk pathway associated with PRRS and imported pig meat, and advises where changes have been made to the draft IHSs as a result of the submissions received. The draft import health standards have had some amendments made to them as a result of the submissions received; they are ready for issuing as provisional import health standards in accordance with the Biosecurity (Process for Establishing Independent Review Panel) Notice 2008 issued under section 22A of the Biosecurity Act.

Measures for other zoosanitary risks remain in accordance with existing IHSs for similar commodities and the MAF Risk Analysis for Meat and Meat Products (1991).

Relevant links
Provisional IHSs

Review of submissions on the draft IHSs

Draft IHSs

Review of submissions on the risk analysis
The Import Risk Analysis (IRA)  

For more details on the background to the IHS development for pork meat please see appendix one.

### 2. Changes made to draft import health standards

#### pH range changes

- The pH range in the draft IHSs was:

  Cured pig products where the pH of the meat was lowered to 5 or below; or raised to 7.5 or higher;

- The clause is now:

  CURING where the pH of the meat is either lowered to 6 or below; or raised to 7.5 or higher;

- The new lower range is ≤ 6

- The upper range has not changed

- This change is due to published evidence that the PRRS virus is stable at a pH of 6.5 to 7.5, but that the ability to cause infection is rapidly lost at a pH lower than 6, or greater than 7.5. This pH range is cited in the Import Risk Analysis on PRRS virus in pig meat (link provided above).

#### Definition of consumer-ready cuts

- The definition in the draft IHSs was:

  ready-to-cook, high value cuts have been packaged either for direct retail sale or for use in food service operations, that are unlikely to generate trimming waste prior to cooking and have had all of the following major peripheral lymph nodes removed:

  axillary, medial and lateral iliac, sacral, iliofemoral (deep inguinal), mammary (superficial inguinal), superficial and deep popliteal, dorsal superficial cervical, ventral superficial cervical, middle superficial cervical, medial and lateral retropharyngeal, gluteal and ischiatic lymph nodes

- The new definition is:
PREPARATION as consumer-ready cuts packaged for direct retail sale, not
including minced (ground) meat, not including the head and neck, not exceeding
3kg per package, with the following tissues removed: axillary, medial and lateral
iliac, sacral, iliofemoral (deep inguinal), mammary (superficial inguinal),
superficial and deep popliteal, dorsal superficial cervical, ventral superficial
cervical, middle superficial cervical, gluteal and ischiatic lymph nodes; and any
other macroscopically visible lymphatic tissue (i.e. lymph nodes and lymphatic
vessels) encountered during processing.

- The changes to the definition were in response to significant concerns raised in
  the submissions about the clarity of the definition and the inclusion of pig
  meat for “food service operations”.

Submitters were concerned that the option of allowing imported fresh pig meat
for use by food service operations may have resulted in a greater likelihood of
uncooked trim entering waste streams. The Import Risk Analysis sanitary
measures recommendation specified consumer-ready, high value cuts. The
IRA review of submissions defined this more specifically as consumer-ready
cuts commercially packaged for direct retail sale. Therefore fresh cuts for
food service operations have been removed from the definition.

The weight limit of 3kg was added to provide a quantifiable measure that
would limit the commodity to cuts intended and packaged for direct retail sale
to consumers.

The phrase “unlikely to generate trimming waste prior to cooking” was
considered to be unverifiable by MAF Biosecurity Inspectors and the
exporting competent authorities, so this was removed from the definition.

Minced (ground) meat was excluded because verification that minced meat
does not contain any major lymph nodes was not considered possible. The
head and neck were excluded because the Risk Analysis stated that “the
removal of major carcass lymphoid tissues, especially those of the head and
neck, and also the major regional lymph nodes, can be considered to
significantly reduce the risk in meat.”

The term “high value” was not used as it is subjective and unverifiable.

Biosecurity Clearance and Direction section:

- The following has been added to allow for inspection of the consignment as
  well as inspection of the documentation.

The Inspector may also inspect the consignment, or a sample of the
consignment.
Inspection of the consignment will allow verification of the packaging requirements.

Transitional facility section

9.1 Pig meat and pig meat products directed to a transitional facility, must be subject to:

EITHER i) trimming into ready-to-cook, MAF approved high value cuts free from all major peripheral lymph nodes, and packaging for either direct retail sale or use in food service operations:

Examples include frenched legs, rump steaks, topside roasts and schnitzels, eye of silverside roasts, knuckle leg steaks, fillets, boneless loins, eye of loins, eye of short loins, racks cut from the rib loin, butterfly steaks, medallions, escallops.

OR  ii) cooking where the product reaches one of the following minimum core temperature/time parameters:

56 degrees Celsius for 60 minutes; 57 degrees Celsius for 55 minutes; 58 degrees Celsius for 50 minutes; 59 degrees Celsius for 45 minutes; 60 degrees Celsius for 40 minutes; 61 degrees Celsius for 35 minutes; 62 degrees Celsius for 30 minutes; 63 degrees Celsius for 25 minutes; 64 degrees Celsius for 22 minutes; 65 degrees Celsius for 20 minutes; 66 degrees Celsius for 17 minutes; 67 degrees Celsius for 15 minutes; 68 degrees Celsius for 13 minutes; 69 degrees Celsius for 12 minutes; 70 degrees Celsius for 11 minutes

OR iii) curing where the pH of the meat is either lowered to 5 or below; or raised to 7.5 or higher; or dry curing for at least 12 months.

9.2 Where the meat requires trimming, the trimming waste may be processed according to the cooking parameters stated in clause 9.1.ii, and/or curing stated in clause 9.1.iii of this import health standard.

9.3 All packaging and solid waste (including any trimming waste not processed according to clause 9.1.ii or 9.1.iii) must be collected and disposed by a process such as autoclaving, deep burial, incineration, or rendering approved by MAF.

9.4 The operator of the transitional facility must send details of disposal to the Operations Team, Border Directorate, MAF Biosecurity New Zealand, Ministry of Agriculture and Forestry, PO Box 2526, Wellington, New Zealand. Email: operations@maf.govt.nz or fax: +64 4 894 0662.

The new transitional facility section is:
9.1 Pig meat and pig meat products directed to a transitional facility, must be subject to:

**EITHER**

i) **COOKING** where the product reaches one of the following minimum core temperature/time parameters:
   - 56 degrees Celsius for 60 minutes;
   - 57 degrees Celsius for 55 minutes;
   - 58 degrees Celsius for 50 minutes;
   - 59 degrees Celsius for 45 minutes;
   - 60 degrees Celsius for 40 minutes;
   - 61 degrees Celsius for 35 minutes;
   - 62 degrees Celsius for 30 minutes;
   - 63 degrees Celsius for 25 minutes;
   - 64 degrees Celsius for 22 minutes;
   - 65 degrees Celsius for 20 minutes;
   - 66 degrees Celsius for 17 minutes;
   - 67 degrees Celsius for 15 minutes;
   - 68 degrees Celsius for 13 minutes;
   - 69 degrees Celsius for 12 minutes;
   - 70 degrees Celsius for 11 minutes;

OR  ii) **CURING** where the pH of the meat is either lowered to 6 or below; or raised to 7.5 or higher; or dry curing for at least 12 months;

OR iii) **PREPARATION** as consumer-ready cuts packaged for direct retail sale, not including minced (ground) meat, not including the head and neck, not exceeding 3kg per package, with the following tissues removed: axillary, medial and lateral iliac, sacral, iliofemoral (deep inguinal), mammary (superficial inguinal), superficial and deep popliteal, dorsal superficial cervical, ventral superficial cervical, middle superficial cervical, gluteal and ischiatic lymph nodes; and any other macroscopically visible lymphatic tissue (i.e. lymph nodes and lymphatic vessels) encountered during processing.

**Note:** Meat may be directed to a transitional facility for storage before being directed to a transitional facility for processing if indicated on the import permit.

9.2 Where the meat requires trimming, the trimming waste may be processed according to the cooking parameters stated in clause 9.1.i, and/or curing stated in clause 9.1.ii of this import health standard.

9.3 All packaging and solid waste (including any trimming waste not processed according to clause 9.1.i or 9.1.ii) must be collected and disposed of by a process such as autoclaving, deep burial, incineration, or rendering approved by MAFBNZ.

9.4 All liquid waste must be disposed of through a municipal wastewater management system, or a method approved by MAFBNZ.

9.5 The operator of the transitional facility must maintain records of disposal that may be audited by MAFBNZ.

- The changes to the transitional facility section were in response to concerns raised in submissions.
o Clause 9.4 above was added to clarify the requirements for liquid waste.

o Clause 9.5 was changed and the note advising that meat could be directed to a transitional facility for storage was added to resolve operational issues.

Country specific changes to the veterinary certificate sections – Mexico (Sonora)

- The country freedom clause was:

  The pig meat/pig meat products are derived from animals raised and slaughtered in Sonora State, which has remained free of hog cholera (classical swine fever) during the previous 12 months.

- The country freedom clause is:

  The pig meat/pig meat products are derived from animals born, raised and slaughtered in Sonora State, which has remained free of hog cholera (classical swine fever) during the previous 12 months.

- The change was made in response to a submission questioning whether animals born outside of Sonora State could be raised and slaughtered in Sonora state and be eligible for import.

Country specific changes to the veterinary certificate section – Canada/USA

- The following was added to the Canada/USA veterinary certificates:

  NOTE: If this consignment does not originate from pigs born, raised, and slaughtered in the country exporting this consignment, additional certification must be provided by the country of origin certifying that the pig meat/pig meat products/pig by-products are eligible for export to Canada or the USA (as applicable) and New Zealand.

- The change was made in response to a submission questioning whether an official veterinarian from Canada or the USA would be asked to certify the health status of the other country, since the IHSs for Canada and the USA have been combined.

Definitions and clauses were updated

- Minor changes were made to clarify language and definitions.
3. Studies published since the review of submissions on the import risk analysis

There are three particularly significant studies that have been published since the review of submissions on the risk analysis:


These studies have been reviewed in detail in the review of submissions on the draft Import Health Standards; see clauses 4.1.17, 4.1.66, and 4.1.97. In summary, MAF considers that these studies do not support a substantive change in the conclusion of the risk analysis – that is, that the risk of PRRS in pig meat can be effectively managed by limiting the importation of uncooked pig meat to consumer-ready cuts packaged for direct retail sale.

4. Key elements of risk management in the provisional IHSs

**Virus load**

MAF considers that the provisional import health standards will deliver an appropriate level of protection from PRRS by the addition of consumer-ready cuts to the current mitigation measures of cooking or curing.

As detailed in the review of submissions on the draft import health standards, the substantial reduction in PRRS virus in pig meat following the normal processing, storage, and export of pig meat for consumption is an important risk management consideration. MAF concludes from the scientific information that this will result in a significant reduction in the amount of PRRS virus likely to be present in any imported meat.

The requirement for the lymph nodes to be removed further reduces the likelihood of any significant load of PRRS virus from imported pig meat.

**Packaging**
The requirements for each consumer-ready cut of fresh meat to be a maximum of 3kg and packaged for direct retail sale will meet the intention of the risk analysis. The commodity definition specified in the provisional IHSs will ensure that uncooked pig meat entering waste streams, and from there potentially being consumed by pigs, is kept to an absolute minimum.

Appendix 1. Further Background information

Background

Until September 2001 pig meat was imported into New Zealand without sanitary measures for the Porcine Reproductive and Respiratory Syndrome (PRRS) virus. A study in 1999 demonstrated that it was possible to transmit the virus to pigs by the ingestion of fresh, infected pig meat. On 31 August 2001, MAF instituted provisional measures requiring that all pig meat imported from countries with PRRS be either cooked or cured to certain specifications, until a full risk analysis could be completed.

The MAF Import Risk Analysis (IRA) on PRRS virus in pig meat was released for public consultation on 25 July 2006. The Review of Submissions was published on 11 June 2007.

The IRA concluded that, in the absence of mitigation measures, the risk of PRRS in imported pig meat is non-negligible, and the following sanitary measures were recommended to effectively manage the identified risk.

- Pig meat must be either from a country free from PRRS; or
- treated prior to import by approved cooking or pH change; or
- in the form of consumer-ready cuts; or
- further processed by cooking, pH change, or preparation as consumer-ready cuts on arrival in a transitional facility.

This resulted in new draft import health standards allowing for the importation of consumer-ready cuts of fresh meat being released for consultation in November, 2007. No additional options for managing risk have been added to the IHS for pig by-products, as these products could not meet the definition of consumer-ready cuts.

The draft IHS consultation period closed on 15 June 2008, and 31 submissions were received and reviewed. This review also considered all relevant scientific information published since the completion of the IRA.

7 April 2009