

Meat technology update

1/10 – February 2010

Market access for animal by-products

- A major topic of enquiry addressed to the CSIRO/MLA/AMPC industry services project is market access for meat by-products.
- Market access requirements are negotiated by AQIS in consultation with industry.
- AQIS manages programs to verify that market access requirements are met and can be attested to on health certificates.

Most animal by-products not intended for human consumption are not prescribed goods. This means that the Export Control (Prescribed Goods General) Order 2005 does not apply, and an export permit is not required to export these products. Any Australian regulations for production of these products are not specifically about exported product. Establishments are not required to be registered as export plants, but plants may have to be listed as eligible to export to certain markets. Importing countries have a wide range of requirements for the processing and certification of imported animal by-products. These requirements may be negotiated on a government-to-government basis, often with industry involvement. The requirements may be attested to by AQIS on health certificates that accompany the exports. AQIS has procedures in place to verify that importing country requirements are complied with so that health certificates can be issued.

This Update explains some of the importing country requirements, particularly for rendered products. Meat and bone meal is used for animal feed and is considered to be one step away from the human food chain. For this reason it tends to attract more attention from importing country regulators than other co-products such as hides and petfood, which are not expected to relate to the human food chain.

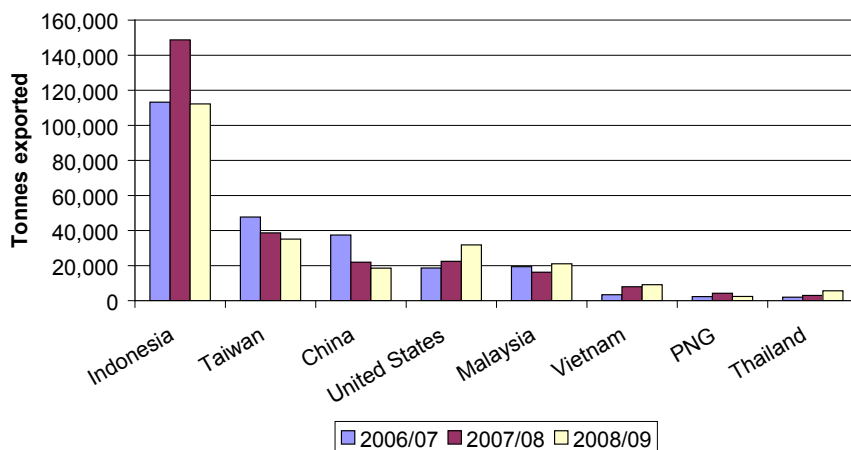


Figure 1: Major export destinations for meat and bone meal

Destinations for rendered products

About 40% of Australia's production of meat and bone meal is exported. The exported product had a value of about \$180 million in 2008/09. About 65% of Australia's production of tallow is exported with a value of about \$300 million in 2008/09. Figures 1 and 2 show the main export destinations for meat meal and tallow. Although EU countries do not appear on the charts of major export destinations, the EU has the most comprehensive market access requirements. Exports of meat and bone meal to the EU are about 1,000 to 2,000 tonnes. There are substantial exports of meat and bone meal to the USA. Much of this product is exported according to EU market access requirements. This is because it is used to make petfood that could be exported to the EU. Exports to the EU and USA are speciality products, such as low-ash ovine meal—which can attract high premiums.

Complying with import requirements

Some importing countries may impose specific requirements for imported animal by-products. Requirements are usually notified to AQIS. AQIS informs the relevant industry sectors through the industry associations. AQIS negotiations with the importing country reflect Australian production and animal health conditions. In the case of rendered products, Australian



state regulations require that products are produced according to the Australian Standard for the Hygienic Rendering of Animal Products. The usual position is for AQIS to submit that the outcomes of the Australian Standard for the Hygienic Rendering of Animal Products in conjunction with the excellent animal health status of Australia address any risks or concerns, and are equivalent to the importing country's requirements. AQIS will seek, where possible, to have the Australian Standard accepted as the basis for the import of Australian rendered products.

If the conditions for import are about production methods or sourcing of raw materials, AQIS will list establishments as complying with the agreed requirements. This is done following compliance audits. The audits may be conducted by AQIS or through an audit program by approved third party auditors which may be managed by the relevant industry association and supervised by AQIS. Only establishments that are listed as eligible to export by-products to specific countries can obtain health certificates to accompany exports to the specified countries.

Non-AQIS Registration

Some countries have requirements that are not negotiated on a government-to-government basis and which do not require AQIS involvement. These countries may have a registration process by which the manufacturer, exporter or specific products may have to be registered with the importing country before imports are accepted. For example, China requires registration of producing establishments and Malaysia requires registration of products before imports of meat and bone meal are accepted. Registrations with importing countries may be in addition to requirements outlined on the agreed health certificate. Any additional certification requirements are verified by AQIS.

Australian Standard for Rendering

All rendering plants in Australia should comply with the Australian Standard for the Hygienic Rendering of Animal Products and this is the basis for negotiating market access for meat and bone meal and tallow with importing countries. The Australian Standard includes a comprehensive range of rendered products in its scope. It is aimed at safe production of rendered products used in feeds for animals.

The principle elements of the standard are that:

- there must be an approved arrangement i.e. a documented quality management program that includes a HACCP plan;
- construction standards must facilitate hygienic rendering;
- operational conditions must facilitate hygienic rendering;
- heat treatments must be validated by demonstrating compliance with a microbiological performance standard designed to confirm that spore-forming bacteria of concern can be eliminated;

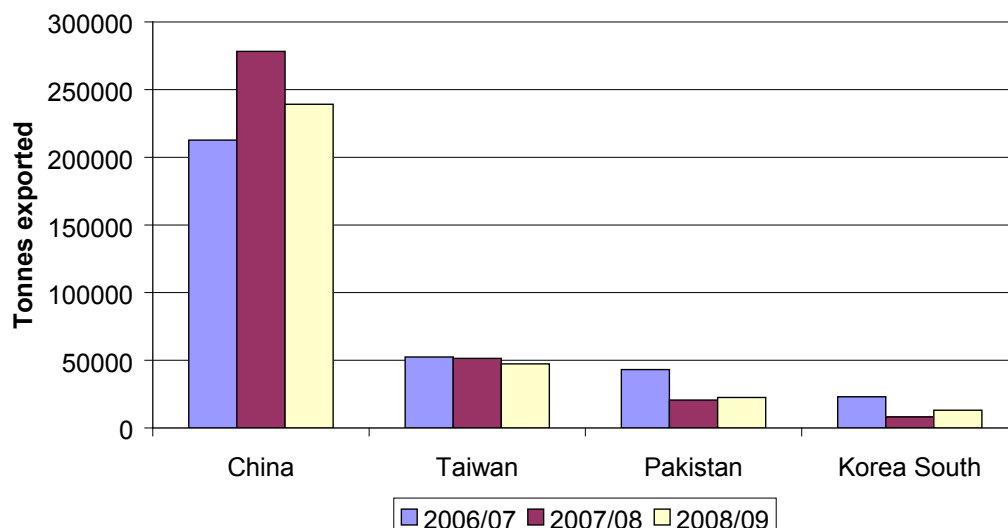


Figure 2: Major export destinations for tallow

- products are tested for *Salmonella*, and effective corrective action is taken if *Salmonella* is detected.

Supplementary requirements for market access

For rendered products, there are cases where importing countries have supplementary requirements in addition to compliance with the Australian Standard for Rendering. Rendering establishments are audited to verify that they comply with the supplementary requirements. Audits of the supplementary requirements are conducted by independent auditors, usually as part of an audit program managed by the Australian Renderers Association and verified by AQIS. AQIS may also provide direct listing of establishments and may approve other auditing programs.

Indonesia

The main market for meat and bone meal is Indonesia (see Figure1). The requirements for listing by AQIS to export to Indonesia are that:

- establishments must comply with the Australian Standard for the Hygienic Rendering of Animal Products;
- animal by-product meals are free of pig materials; and
- meals are labelled with the following:

The products are not fit for human consumption and do not contain swine products, and are only for poultry, swine and aquaculture feed purposes.

Establishments are expected to have a documented Indonesian program that explains how meat and bone meal that meets the Indonesian requirements is produced. This could mean specifying the source(s) of raw material and the supplier assessments used to ensure that raw material is pork free.

In addition to the requirements for listing establishments for export of meat and bone meal to Indonesia, AQIS has advised that:

- labelling of bulk product must be either:
 - on the tail-gate board of the container; or
 - on the accompanying documents;

- product should be shipped directly from Australia to Indonesia or via an intermediate port approved by the Indonesian Directorate General of Livestock Services (DGLS);
- import permits are required;
- for every certificate, exporters are to provide AQIS with a statutory declaration confirming that the consignment complies with the Australian standard, is free of pig material, and meets Indonesian labelling requirements.

Philippines

Establishments will be listed to export meat and bone meal to the Philippines if AQIS is advised by the ARA or another AQIS-supervised auditing program that the establishment complies with the Australian Standard for the Hygienic Rendering of Animal Products. The establishment and products must also be registered with the Philippines Bureau of Animal Industries (BAI). Results of microbial and chemical testing have to be supplied to the BAI for registration purposes. In addition, containers are labelled with the commodity description, AQIS establishment number, date of production and Australian 'restricted animal material' statement.

European Union

Establishments must be listed by AQIS if they want to export meat and bone meal or tallow to EU countries. In addition, establishments that want to supply meat and bone meal to non-EU countries, including Australia, for use in pet food that is to be exported to the EU must be listed as complying with EU requirements. There are some small differences between the conditions for the two types of listing.

The market for meat and bone meal in the EU and in third countries that export petfood to the EU is limited to speciality meals such as ovine meal and small quantities of other single species meals; however, substantial premiums may be available. The value of the meals may be three times the value of regular meat and bone meal, but the premiums are inconsistent and are not always available due to periods of over-supply.

Establishments that require listing to export rendered product to the EU must comply with the Australian Standard for the Hygienic Rendering of Animal Products and requirements contained in the AQIS manual 'Animal By-products (ABP) Program for Export to the European Union. Part I Rendered Animal Products'. The requirements in this manual are based on European Commission regulation 1774/2002. These regulations set out EU requirements for the production and import of a wide range of non-edible animal by-products.

EU requirements are detailed, and the AQIS animal by-products program should be consulted to find out the precise requirements. In summary, the requirements are:

Raw material sourcing

Raw material must comply with the EU definition of Category 3 material. The important (but not exclusive) elements of Category 3 material are that:

- material must be sourced from animals that have not been treated with prohibited substances. Prohibited substances include hormonal growth promotants (HGP) and beta-agonists;

- intestinal contents must be excluded. This means that paunches must be emptied and intestinal material must be cut and washed;
- material must be free from signs of diseases transmissible to humans and animals.

Plant approval

Establishments must be approved as Category 3 processing establishments. The establishments may process only Category 3 material. Category 1 or 2 materials are not permitted in the building, even if processed through a separate line. This means that a Category 3 plant cannot have bovine material or any dead stock on the premises. Bovine material is usually Category 1 unless it can be demonstrated that it is not from animals treated with HGP. Dead stock is Category 2 material because it has not been inspected and shown to be free of diseases communicable to humans and animals.

Approval as a Category 3 rendering plant also requires that establishments have quality management systems with procedures to address EU requirements. Establishments with an approved arrangement according to the Australian Standard for the Hygienic Rendering of Animal Products should have satisfactory procedures to comply with most EU requirements.

There must be a HACCP plan that nominates processing temperature, raw material particle size, duration of heat treatment and pressure, if applicable, as critical control points. There must be recording equipment to continuously record pressure and temperature, and corrective action to prevent any material that has not received the nominated heat treatments from being released.

Heat treatments

The rendering processes used to produce meat and bone meal for export to the EU must be approved. European Commission regulation 1774/2002 lists seven acceptable rendering processes. Mammalian material must be processed according to method 1—which is batch, or continuous, processing at 133°C—and 3 bar (absolute) pressure for at least 20 minutes, with a raw material particle size of no more than 50 mm.

Non-mammalian material may be processed according to methods 1 to 7, but method 6 is for fish only. Methods 2 to 5 are based on commercial rendering systems and Australian renderers may comply with the nominated heat treatment parameters, particularly of method 4, which is based on a rendering process similar to the Keith Equacooker.

Method 7 allows for renderers to nominate the parameters of particle size, time, temperature and pressure (if applicable). The method as specified by the renderer can be approved. To obtain approval, samples of product discharged from the heat treatment must be tested for *Clostridium perfringens*; and samples of product taken from store must be tested for *Salmonella* and *Enterobacteriaceae* over a period of one month. If *Clostridium perfringens* is absent in samples collected on consecutive processing days for one month, and samples comply with criteria for *Salmonella* and *Enterobacteriaceae*, the rendering process can be approved.

Microbiological testing

Meat and bone meal exported to the EU must comply with microbiological criteria and every container load must be tested. Five samples must be taken from each container and tested

for *Salmonella* and *Enterobacteriaceae*. If *Salmonella* is detected in any of the five samples, the container load is not eligible for export to the EU. None of the five samples may exceed an *Enterobacteriaceae* count of 300 per gram and no more than 2 samples can be in the range 10 to 300 per gram.

Exports of EU-eligible meals to non-EU countries

If Australian meat and bone meal is used to make petfood that is exported to the EU, the meat and bone meal must comply with EU requirements. Establishments that produce the meat and bone meal are listed by AQIS; and for exported products, health certificates are provided attesting that the product complies with EU requirements. Product from listed plants may also be used within Australia to produce petfood that is exported to the EU. To obtain a listing, establishments must comply with the EU requirements, but there is a derogation which permits material that has been treated with prohibited substances e.g. bovine material from animals treated with HGP, to be processed in the same premises. In addition, mammalian material may be processed according to any of methods 1 to 7.

EU listings for other products

EU regulation 1774/2002 includes requirements for many meat by-products other than meat meal. Establishments can be listed by AQIS to export these products to the EU, and there are auditing programs aimed at listing establishments for the export of various animal by-products to the EU. The auditing programs are usually managed by an industry association and verified by AQIS, or are managed directly by AQIS.

Examples of establishment listings required to obtain health certificates to export to the EU, other than for production of meat and bone meal, are:

- production of salted skins and hides of ungulates (note that listing is not required to export wet-blue hides or pickled pelts);
- production of processed pet food;
- production of blood products;
- production of tallow and animal fats and oils.

Requirements and procedures for listing are contained in the AQIS Animal By-products (ABP) Program for Export to the European Union, Part 1 Rendered Animal Products; Part III Hides and Skins; Part IV Petfood and Part VI Blood Products.

Summary

Non-prescribed goods of animal origin may require an accompanying health certificate signed by AQIS, if this is an importing country requirement.

The wording on health certificates is negotiated between AQIS and the importing country on a government-to-government basis. The wording may attest to specific processing or sourcing requirements. Market access requirements are constantly under review with requirements for new product/importing country requirements being introduced and existing requirements being amended.

Exporters must consult AQIS to obtain up-to-date requirements. Requirements for various countries, including certification details, are outlined in the Export Meat Manual Volume 2.

The information contained herein is an outline only and should not be relied upon in place of professional advice on any specific mat-

Contact us for additional information

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