

CODE OF PRACTICE

FOR HYGIENIC RENDERING OF ANIMAL PRODUCTS

2025

Australian Renderers Association Inc.

FOREWORD

The Australian Renderers Association (ARA) first published the *Code of Practice for the Hygienic Rendering of Animal Products* in 1994, led by founding president Brian Bartlett AM. A revised edition followed in 1996, introducing the requirement for rendering establishments to implement a documented Quality Management System incorporating HACCP principles. It also adopted an outcome-based structure aligned with the Australian Standards for meat production.

From 1997, the Department of Agriculture adopted the ARA Code and its associated accreditation scheme as the basis for export listing of rendering establishments, where market access conditions required verification. The Code, together with AS 5008, continues to support export eligibility in line with importing country requirements.

AS 5008—Australian Standard for the Hygienic Rendering of Animal Products—was developed in 2001 by the ARMCANZ Meat Standards Committee and includes elements drawn from this Code.

This latest revision introduces a formal framework for raw material classification, allowing inputs to be designated for feed or non-feed applications in line with regulatory obligations, customer expectations, and importing country requirements. The maximum allowable level of insoluble impurities in tallow has also been updated to align with the WOAH *Terrestrial Animal Health Code*. New definitions throughout the document ensure consistency with Codex HACCP principles, WOAH standards, and Australian regulatory language.

Compliance with **AS 5008** remains the minimum legal standard for rendering operations in Australia. This Code offers enhanced guidance to strengthen quality systems, support product integrity, and meet evolving industry and market requirements.

The Australian Renderers Association is the author and publisher of this document and should be cited accordingly.

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INTRODUCTION

The Australian Renderers Association (ARA) Code of Practice for the Hygienic Rendering of Animal Products outlines the industry benchmark for quality, hygiene, and process integrity across Australian rendering premises. Developed and maintained by the ARA in consultation with industry and government, the Code supports the production of safe, traceable, and high-quality rendered products that meet domestic and international standards.

This Code complements the **Australian Standard for the Hygienic Rendering of Animal Products (AS 5008)** by providing an enhanced framework that incorporates best-practice quality management systems, raw material classification, validated heat treatments, and robust sampling and verification programs. While **AS 5008** sets the minimum regulatory standard, this Code is designed to assist rendering premises in meeting or exceeding those requirements, particularly where customer expectations, importing country standards, or market access conditions demand higher assurance.

The Code underpins the **ARA Accreditation Program**, which is formally recognised by the Commonwealth of Australia for the listing of establishments eligible to export rendered products. Annual independent audits assess compliance with this Code, AS 5008, and importing country requirements.

1. SCOPE AND APPLICATION

This Code of Practice applies to the construction, equipment, and operation of rendering premises in Australia. It sets out industry-agreed standards for the hygienic production of rendered animal products intended for use in both animal feed and non-feed applications.

The Code is to be read in conjunction with the **Australian Standard for the Hygienic Rendering of Animal Products (AS 5008)**, which defines the legislated minimum requirements for rendering operations. While compliance with AS 5008 is mandatory, this Code provides an enhanced quality framework to support industry performance, facilitate export access, and promote continuous improvement.

The Code includes requirements relating to:

- Construction, equipment, and operational hygiene standards;
- Classification of raw material for animal feed and non-feed applications;
- Implementation of quality management systems, including HACCP;
- Sampling and testing programs to verify process control and product suitability;
- Compliance with applicable domestic legislation and importing country requirements;
- Staff training and competency in hygienic rendering practices.

The **ARA Accreditation Program** assesses a premises' conformance with this Code, AS 5008, and relevant export requirements. Accreditation is a condition for export listing to nominated international markets. Audits are conducted annually by ARA-approved independent certification bodies.

Reference Note:

The following standards are outside the scope of this Code but should be referred to where applicable:

- National Standard for Recycling of Used Cooking Fats and Oils Intended for Animal
 Feeds
- AS 5392 Hygienic production of spray-dried blood products
- Australian Feed Standard for Food Producing Animals

2. OBJECTIVES OF THE CODE

The objectives of this Code are to:

- Provide practical standards and direction for the hygienic production of rendered products;
- Ensure rendered products comply with customer specifications, legislation, and importing country requirements;
- Promote the validated use of heat treatments to manage biological hazards;
- Minimise the risk of post-processing contamination of rendered products;
- Apply HACCP principles to identify and control biological, chemical, and physical hazards;
- Establish a verification system to confirm the effectiveness of quality management programs and adherence to this Code;
- Support staff training and foster a strong culture of food and feed safety;
- Provide a framework for ARA Accreditation and facilitate eligibility for export market access.

3. **DEFINITIONS**

APPROVED ESTABLISHMENT

Meeting the requirements of the controlling authority under the ARA Accreditation Program.

APPROVED LABORATORY

A laboratory accredited by the National Association of Testing Authorities, Australia (NATA) and approved to test for *Salmonella* and *Clostridium perfringens*.

APPROVED SLAUGHTERHOUSE

Licensed slaughter facilities approved by the relevant authorising government agency or agencies.

AUDIT

A systematic and independent examination to determine whether activities and related results comply with planned and documented arrangements and whether these arrangements are implemented effectively and are suitable for achieving objectives.

APPROVED AUDITOR

An Approved Auditor is an entity recognised by the controlling authority as an independent assessor of a renderer's compliance with the ARA *Code of Practice*, the *Australian Standard for the Hygienic Rendering of Animal Products* (AS 5008), and any applicable importing country requirements. To be designated as an Approved Auditor under this Code of Practice, the auditor must have relevant industry experience, be registered with Exemplar Global as a Food Safety Auditor, and have successfully completed the ARA Hygienic Production of Rendered Animal Products Accreditation Workshop.

CONTROLLING AUTHORITY

A government agency that has jurisdiction over the rendering industry.

CRITICAL CONTROL POINT (CCP)

A point, step, or procedure at which control can be applied and is essential to prevent or eliminate a food safety hazard or reduce it to an acceptable level.

CUSTOMER REQUIREMENTS

The minimum standards specified by a customer when procuring Australian rendered products. These standards may relate to the species of the raw material, its classification, the operating and processing parameters of the specific rendering production line, as well as particular storage, packaging, labelling instructions, or minimum quality specifications.

DRY CLEANING

Removal of objectionable matter and debris without the use of water or water-based cleaning agents. Cleaning by scraping, sweeping, brushing, and/or vacuuming.

FOREIGN MATTER

Plastic, metal, glass, wood, or other physical contamination in raw material or finished product.

HAZARD ANALYSIS CRITICAL CONTROL POINTS (HACCP)

A system that identifies, evaluates and controls hazards that could affect product safety, in accordance with the *Codex Alimentarius General Principles of Food Hygiene*.

HEAT TREATMENT

The total heat applied in the principal heating step of the rendering process to destroy pathogenic microorganisms, zoonosis, and transboundary diseases.

IMPORTING COUNTRY REQUIREMENTS

The known minimum standards that must be met for Australian rendered products to be accepted into an overseas market. These standards are reflected in official documentation, including the Manual of Importing Country Requirements (MICoR). They may include, but are not limited to, the species and classification of the raw material, processing parameters for the rendering line, hygiene and handling procedures, labelling and packaging instructions, and minimum quality specifications.

OTHER PROCESS / PROCESSES

Rendering processes that do not rely on heat alone to eliminate pathogenic microorganisms, zoonosis, and transboundary diseases and stabilise raw materials. For example, chemical treatments.

PREVENTABLE DELAY

Delays in the transport of raw material from source to rendering premises caused by systematic planning failures, including pick-up routes, operator/driver training and communication with suppliers.

PROTEIN MEAL

De-fatted, dried and milled solid product of the rendering process. May include, but is not limited to, meat meal, meat and bone meal, blood meal, feather meal, poultry meal and fish meal.

PROTEIN MEAL HANDLING AREA

The area of the rendering premises where dried material is milled, screened, transferred, stored, bagged and/or loaded out in bulk.

PROCESSING AREA

The area of the rendering premises where rendering processes take place. Typically, the processing area is separated into the areas of:

- The raw material area is used for receiving, classifying, cleaning, storing, conveying, and reducing the size of raw material in preparation for the rendering process.
- the processing area, where suitable heat, chemical treatment, pH adjustment and
 or other approved suitable methods to eliminate pathogenic microorganisms,
 zoonosis' and transboundary diseases, in compliance with regulatory
 requirements and validated as per the Heat Treatment section of this code.
- · suitable tallow handling and storage areas; and
- dedicated cleaning areas.

QUALIFIED ANTE-MORTEM INSPECTION

Ante-mortem inspection conducted on live animals prior to slaughter by a competent person who has received appropriate training and operates in accordance with the Quality Management System of the approved slaughtering establishment.

QUALIFIED POST-MORTEM INSPECTION

Post-mortem inspection conducted on animal carcasses and offal after slaughter by a competent person who has received appropriate training and performs the inspection in accordance with the quality management system of the approved slaughtering establishment.

QUALITY MANAGEMENT

All planned and systematic activities implemented to ensure that a product meets defined quality standards and complies with applicable legislative requirements.

QUALITY MANAGEMENT SYSTEM (QMS)

The formalised system that documents the processes, procedures, and responsibilities necessary to achieve the organisation's quality objectives. The QMS must include a Food Safety Culture Policy and incorporate all prerequisite programs, monitoring activities, and continuous improvement mechanisms.

RAW MATERIAL

For the purposes of this Code, raw material is defined as animal-derived biological material intended for processing through rendering to produce fats, oils, protein meals, or other rendered products.

RAW MATERIAL CLASSIFICATION

The process of assessing raw material to determine its suitability for use in animal feed or non-feed applications, as specified in the rendering premises' Quality Management System.

RAW MATERIAL AREA

Area for receiving, qualifying, cleaning, storing, conveying, and reducing the size of raw material in preparation for the rendering process.

RENDERER

A processing establishment that carries out the rendering.

RENDERING

The controlled application of heat and other processes to animal products (raw material) to reduce moisture, separate fat and protein, and inactivate pathogenic microorganisms, zoonotic agents, and transboundary disease risks. The process produces safe, stable coproducts—protein meals and rendered fats—used in animal feed, pharmaceuticals, industrial manufacturing, and other specialised applications.

RENDERING PREMISES

Building and equipment of the rendering process, as well as the environment and boundaries.

Typically, rendering premises are separated into the following areas:

- raw material area for the receiving, classifying, cleaning, storing, conveying and size reduction of raw material in preparation for the rendering process.
- processing area.
- · processed animal protein meal handling area; and
- tallow, fats and oils handling area.

RENDERING PRODUCTION LINE

A defined set of equipment designed to process a specific raw material type, or types, from receival to finished product load out.

RENDERED PRODUCTS

The co-products resulting from the rendering process including protein meals (such as meat and bone meal, feather meal, poultry meal and blood meal) and rendered fats and oils.

RESTRICTED ANIMAL MATERIAL (RAM)

RAM is defined as any material taken from a vertebrate animal other than tallow, gelatin, milk products or oils. It includes rendered products, such as blood meal, meat meal, meat and bone meal, fish meal, poultry meal, eggs, feather meal, and compounded feeds made from these products.

RUMINANT FEED BAN

The Australian Ruminant Feed Ban National Uniform Guidelines ban the feeding to all ruminants of all meals, including meat and bone meal (MBM), derived from all vertebrates, including fish and birds. The Ruminant Feed Ban is a nationally legislated prohibition in Australia that makes it illegal to feed RAM to ruminant animals, including cattle, sheep, goats and deer.

RENDERED FAT

Any final or intermediate solid, greasy, or liquid fat-containing product obtained from rendering and/or hydrolysis of animal tissues. Commonly referred to as **TALLOW**, and referred to as such throughout this Code.

TALLOW HANDLING AREA

The area of the rendering premises where tallow is stored, settled, drained, filtered, and loaded out.

SPECIFIED HEAT TREATMENT

A heat treatment operated according to specified processing parameters. Specified heat treatments may be designed to comply with regulatory requirements and achieve a specific microbial outcome in conjunction with particle size and dwell time.

VALIDATION

The process of demonstrating that the HACCP system, as designed, is capable of effectively controlling identified hazards to ensure the production of a safe and suitable product. Validation includes two key elements: a scientific or technical justification for the control measures and documented evidence that supports their effectiveness.

VERIFICATION

An established monitoring program to verify that controls put in place are being completed and effectively controlling hazards.

WET CLEANING

Removal of objectionable matter and debris with the use of water and water-based cleaning agents.

4. CONSTRUCTION OF PREMISES

4.1 Site and services

OBJECTIVE

Rendering premises are provided with essential services for hygienic rendering.

- **4.1.1** Rendering premises must comply with relevant government and statutory requirements.
- 4.1.2 Rendering premises must have:
 - adequate supplies of hot and cold potable water.
 - drainage that prevents overflow and/or pooling.
 - waste disposal systems sufficient to manage solid and liquid wastes.
 - energy sources sufficient to maintain hygienic rendering.

4.2 Hygienic construction

OBJECTIVE

Rendering premises must be constructed and maintained to facilitate hygienic production and storage.

- **4.2.1** Buildings in which rendering operations take place and rendered products are processed must be fully roofed. The roof must be in good repair and be weatherproof. Rendered products may be stored outside the building in enclosed bins, silos, containers or tanks that are weatherproof.
- **4.2.2** Walls and internal divisions or bays must be of solid construction.
- **4.2.3** Doors must be soundly constructed and close fitting.
- **4.2.4** Drainage must not flow or seep into the meal handling area without proper containment.
- **4.2.5** External areas, storage tank areas, and roadways must be constructed to allow maintenance and the removal of spills.
- **4.2.6** Buildings must be ventilated and/or equipped with extraction to prevent condensation and excessive heat build-up and to control dust.
- **4.2.7** Buildings must be designed to restrict access to pests, including birds, vermin, and insects.

4.3 Defined areas

OBJECTIVE

The rendering premises layout and operational procedures must minimise the risk of biological, chemical, and physical contamination of rendered products.

- **4.3.1** Buildings must be constructed or internally separated so that there are clearly defined areas. There must be defined areas for:
 - · raw material handling and processing
 - · handling and storage of rendered products, and
 - load-out.
- **4.3.2** The areas of the rendering premises must be defined and recognised for the purpose of controlling personnel traffic between the areas. The defined areas must be documented on a layout of the premises.
- **4.3.3** The facilities must be constructed so there is no direct contamination from the raw material area to the processed animal meal handling area and any other finished rendered products storage areas.

5. RAW MATERIAL COLLECTION, RECEIVAL AND CLASSIFICATION

OBJECTIVE

To ensure that all raw material is handled hygienically and classified appropriately for use in either animal feed or non-feed applications.

Raw material must be transported and received in a manner that prevents loss, cross-contamination and degradation of hygienic quality.

5.1 Raw Material Classification Process

- **5.1.1** All raw material must be inspected at the point of receival and classified by the specific rendering facility QMS.
- **5.1.2** A rendering premises may operate multiple production lines with distinct classification criteria.
- **5.1.3** Each production line must have documented classification rules and decision trees within its HACCP plan and Quality Management System, which:
 - Define the raw material types accepted
 - Specify which materials are suitable for use in feed vs non-feed products;
 - Include procedures for traceability, handling, and redirection of unsuitable material.



5.2 Cross-Contamination and Reclassification

- If raw material is contaminated, the batch is reclassified per the QMS.
- The quality system must outline how the reclassified material is handled.

5.3 Documentation and Traceability

All classification decisions must be traceable to:

- · The specific rendering production line;
- Source and type of raw material;
- Ante-mortem/post-mortem inspection records (if applicable);
- Final rendered product classification.

5.4 Handling and Storage Protocols

The QMS must define storage, processing and dispatch protocols for each classification.

5.5 Guidance for Developing QMS for Assessing Suitability for Animal Feed Raw material must be classified as unsuitable for use in animal feed if:

- 1. It meets any of the following exclusion criteria:
 - Animals euthanised using barbiturates (e.g. pentobarbital) or anaesthetic overdose;
 - ii. Decomposed material, including rotting or decomposing carcasses or offal;
 - iii. Assessed as unfit for use in animal feed during ante-mortem or post-mortem inspection; or
- 2. It is not accepted under customer or importing country specifications, even if not explicitly excluded under Australian regulations.

5.6 Raw material road transport

- **5.6.1** All raw material must be transported and conveyed from the source to the processing site without preventable delay.
- **5.6.2** All vehicles used for the collection and transport of raw material must be leakproof.
- Vehicles and equipment used to transport raw material must not be used for transporting cooked products unless they have been thoroughly cleaned, sanitised, dried, and inspected.
- **5.6.4** Vehicles and equipment used to collect and transport raw material must be maintained in a clean state and be cleaned after every delivery.
- Vehicles and other moveable equipment used to transport raw material must be cleaned in a designated area utilising dedicated equipment. This area must be situated and/or designed to prevent the contamination of heat-treated products.

5.7 Raw material transfer within the premises

- **5.7.1** All raw material must be transported and conveyed from the source to processing without preventable delay.
- **5.7.2** All vehicles and equipment used for collection and transfer of raw material must be leakproof.
- **5.7.3** All equipment, either moveable or fixed, must be identified to indicate that it is for use with raw material.
- **5.7.4** Equipment used for transferring raw material must not be used for transferring cooked product unless it has been thoroughly cleaned, sanitised, dried and inspected.
- 5.7.5 Moveable equipment used for raw material handling must be cleaned in a designated area. The area must be situated and/or designed to prevent the contamination of heat-treated product.
- **5.7.6** Any spillages, including raw material during unloading, must be cleaned up without delay.

6. **FOREIGN MATTER**

OBJECTIVE

Raw material is fit for purpose and foreign matter controlled so that the safe use of rendered products is not compromised.

- 6.1 Foreign matter in raw material must be controlled so that product safety and quality is not jeopardised by the presence of foreign matter including, but not limited to, plastic, metal, glass, or other material. There must be a documented procedure for the prevention of foreign material in raw material, and for the handling of foreign material that may be found in raw material.
- **6.2** Suppliers of raw material must be identified according to an approved supplier program.
- **6.3** Raw material specifications must be provided to all suppliers, and the rendering business must retain a signed copy of the acknowledged specifications.
- Raw material must be inspected for foreign material. Results of inspections must be recorded. If visual inspection of raw material is not possible, or raw material cannot be inspected safely, alternative methods of verifying that foreign matter is not in raw material must be documented and implemented.
- 6.5 If foreign matter is observed in raw material, corrective action must be taken and recorded.
- Where in-line metal detectors or magnets are used, they must be tested at a stated frequency, and records of the test must be maintained.



7. HEAT TREATMENT AND OTHER PROCESSES

OBJECTIVE

Heat treatments and other processes must be sufficient to eliminate the risk of transferring pathogens that may be present in raw materials.

7.1 Heat treatment and other process parameters

- 7.1.1 The heat treatments and other processes applied in rendering must be specified for each rendering process. This is achieved by specifying critical limit process values for the parameters that contribute to the effectiveness of the heat treatment. These parameters may include:
 - raw material particle size.
 - temperature achieved in the heat treatment.
 - pressure applied during rendering.
 - duration of heat treatment process or feed rate to a continuous system.
 - other processes that are intended to contribute to the elimination of pathogens, zoonosis, and transboundary diseases.
- 7.1.2 Accurately calibrated temperature and pressure gauges/recorders must be used to monitor the processing conditions. Records must be kept showing the date of calibration of temperature gauges/recorders.

 Calibration must be conducted at a frequency of at least once annually.
- **7.1.3** Records must be maintained to show that the specified critical limits are achieved for each critical control point.
- **7.1.4** Raw material that has not received the specified heat treatment or other applicable rendering processes must be reprocessed.

7.2 Rendering Process Validation

- 7.2.1 The effectiveness of heat treatment and other rendering processes must be validated at least annually for each animal protein stream or production line, and whenever process parameters change. Validation must demonstrate that the process effectively inactivates Clostridium perfringens, a spore-forming bacterium with high heat resistance, to ensure the microbiological safety of rendered products.
- 7.2.2 For the purpose of validation, one sample must be collected per production day from each applicable animal protein stream for ten consecutive working days. If multiple batch cookers operate on the same line using identical parameters, the sample may be taken from any one cooker per day. If no production occurs, the record must state "No Production."
- **7.2.3** Samples must be collected after the heat treatment CCP, or other process is completed.
- **7.2.4** At the time of sampling, the heat treatment parameters (see Section 7.1.1) must be recorded. These parameters define the validated process. The

- critical limit must be met within a tolerance of no more than +2 units above the HACCP Audit Table values.
- 7.2.5 All samples must be individually tested for *Clostridium perfringens* by an approved laboratory. Test results must show less than 10 colony-forming units per gram (<10 cfu/g) for all ten consecutive samples.
- **7.2.6** If any sample exceeds the critical limit:
 - STEP 1: Review and document the process and critical limits.
 - STEP 2: Adjust the heat treatment or relevant rendering process.
 - STEP 3: Notify the ARA-appointed certification body by email.
 - **STEP 4:** Resume sampling and testing for a further 10 consecutive working days to demonstrate compliance.
- **7.2.7** Annual validation of *Clostridium perfringens* must be completed within two months of the annual audit due date. Validation results must be available for auditor review.
- 7.2.8 Laboratory reports of *Clostridium perfringens* testing must be maintained for examination by the Approved Auditor and the Controlling Authority. A record of all samples submitted for testing must be maintained and include:
 - the type of processed animal protein,
 - the critical limit and date of sample collection,
 - the corresponding laboratory report number, and
 - the result of the test.

Test results and sample records must be retained for a minimum of two years.

8. STORAGE AND DESPATCH OF RENDERED PRODUCTS

OBJECTIVE

All rendered products must be handled with equipment that minimises the risk of microbial or physical contamination.

- **8.1** All rendered products must be packaged and/or stored and dispatched in hygienic conditions.
- **8.2** All rendered products must be protected from pests, splashes, aerosols, dust and other sources of contamination.
- **8.3** Storage bins, conveyors, elevators, and other equipment must be adequately ventilated to minimise condensation inside equipment.
- **8.4** Rendered products handling equipment must be maintained in a suitable, clean and dry condition and must have adequate inspection points so that equipment can be examined for cleanliness.

- **8.5** All storage facilities must be emptied and cleaned according to a documented cleaning schedule that is appropriate for the rendered product that is being stored.
- **8.6** All rendered products in storage must be clearly labelled with the identity of the product.
- **8.7** Every container, tank, direct contact packaging or trailer must be inspected and must be clean and dry before it is loaded. Records of the inspection must be documented, including any corrective action.

9. TRACEABILITY AND RECALL

OBJECTIVE

Raw material must be traceable back to the supplier of the raw material.

Rendered products are related to the raw material from which they are made, and records of the link between the two must be maintained.

Rendered product deliveries to customers must be traceable, and rendered products must be able to be recalled if necessary.

- **9.1** Records of the receival of raw material must be maintained. The records must include:
 - date of receival
 - type of material
 - source of material (supplier) and,
 - quantity of material.
- **9.2** Records of the dispatch of all finished rendered products must be maintained. These records must include:
 - date of dispatch.
 - description of product.
 - destination or customer, including address.
 - quantity of product.
 - identification of the carrier and record of container and/or trailer inspection.
- **9.3** Packaged rendered products must be labelled with:
 - product name or description.
 - date of production or date code.
 - name of the manufacturer.
- **9.4** A recall procedure must be documented and tested at least once per year by conducting a mock recall. The results of the mock recall must be recorded and maintained for review. The recall procedure must include the following elements:
 - Emergency contact details



- Recall committee
- Position descriptions
- Traceability process, including company lot identification

10. RETAINED SAMPLES OF RENDERED PRODUCTS

OBJECTIVE

Representative samples of rendered products are retained in case further testing or product evaluation is required.

- 10.1 A representative sample of every load out of all rendered products must be retained for at least three months. The retained sample must be clearly labelled with the details of the load out and the rendered product.
- **10.2** The retained samples must be packaged and stored in conditions that maintain the integrity of the sampled rendered product.

11. RUMINANT FEED BAN

OBJECTIVE

Comply with the applicable Ruminant Feed Ban legislation as implemented by Controlling Authorities.

11.1 Legislation

Establishments must comply with relevant state legislation for labelling animal material for the purpose of identifying those materials that must not be fed to ruminants.

11.2 Labelling of processed animal protein meals

All vertebrate animal material is considered restricted animal material (RAM) and must not be fed to ruminants, except for the following Safe Commodities listed in the WOAH Terrestrial Animal Health Code:

- tallow with maximum level of insoluble impurities of 0.15% in weight and derivatives made from this tallow;
- · gelatine and collagen;
- milk and dairy products.

Restricted Animal Material must be labelled with the statement:

"This product contains restricted animal material –
DO NOT FEED TO CATTLE, SHEEP, GOATS, DEER OR OTHER RUMINANTS"

For bulk product, the statement must be applied to a delivery docket and/or invoice according to legislation.

Bagged material, including bulka bags, must be labelled with the ruminant feed ban statement according to legislation. All labelling must be clear and legible.

11.3 Tallow, fats and oils

Tallow, fats and oils intended for stock feed are defined as -

Tallow and oils include any product—such as tallow, yellow grease, or acid oil—derived from rendered animal fats or used cooking oil that has been filtered or otherwise treated to remove visible particulate matter. These products must meet a maximum insoluble impurity level of 0.15%.

Each establishment must verify compliance with this specification by testing tallow for insoluble impurities at least once every quarter. Results of testing must be recorded, reviewed and retained for a minimum of two years and must be available for inspection by the Approved Auditor and the controlling authority.

Products must be labelled in accordance with legislation as follows:

"This product does not contain restricted animal material"

12. HYGIENE PROCEDURES

OBJECTIVE

The rendering premises are maintained in a condition to ensure the hygienic processing of raw material and the hygienic handling of rendered products.

- **12.1** A documented pest control program including appropriate use of pesticides must be implemented to prevent infestation of the rendering premises by insects, vermin, birds or other pests.
- 12.2 Appropriate cleaning procedures must be documented and implemented for all parts of the rendering premises, including fixed and portable equipment. Cleaning procedures must document the frequency of programmed cleaning and include a program for cleaning any overhead area, bins, conveyors etc. Cleaning procedures must include methods of wet and dry cleaning.
- 12.3 Suitable equipment and cleaning agents must be provided and controlled. Equipment dedicated for use in a defined area must be identified. Cleaning equipment must be stored appropriately.
- **12.4** Hygiene control must include regular inspections of the rendering premises environment and equipment. Inspection schedules and results must be documented.
- 12.5 All materials collected during cleaning must be reprocessed through the heat treatment or disposed of in an appropriate manner.

- **12.6** A documented personnel traffic movement procedure must be established to control the movement of staff and visitors between defined areas (see 4.3.2).
- **12.7** A documented traffic movement procedure relating to non-personnel traffic such as forklifts, bobcats, and trucks, must be established.

13. CHEMICAL CONTROL

OBJECTIVE

Chemicals used within a rendering premises must be handled and controlled to prevent hazards to rendered product quality and safety.

- 13.1 Pest control and cleaning chemicals must be approved by management.

 Chemicals must be assessed by management to determine their appropriate use, storage and handling conditions.
- 13.2 Pest control, cleaning chemicals and lubricants must be stored securely to prevent any risk of contamination of raw material s or rendered products. There must be a designated and clearly signed storage areas for chemicals.
- **13.3** A register of chemicals used on the site must be maintained.
- **13.4** All chemicals must be clearly identified.
- **13.5** Safety Data Sheets (SDS) for all chemicals used on site must be readily available.

14. QUALITY MANAGEMENT SYSTEM

OBJECTIVE

A quality management system to control all aspects of production, storage and load out that affect the hygienic quality of rendered products must be implemented.

- **14.1** Rendering establishments must document a quality management system that may include, but is not limited to, the following elements:
 - a quality policy that states the management's commitment to produce rendered products that are of good quality, safe for use and which comply with the controlling authority, customer and importing country requirements. This policy must be endorsed by the company CEO and Site Manager and reference management's commitment to Food Safety.
 - a policy that promotes a food safety culture.
 - the responsibilities of the people who manage product quality, and their backups in the event of absence.
 - management review.
 - internal audit program this should include an at least annual HACCP review and annual review of all elements of the QMS. The Internal Audit program must be conducted against the ARA COP, AS and market access requirements.

- document control.
- training, including induction of new employees and contractors.
- procedures for the hygienic production of rendered products. These
 procedures are a prerequisite to developing a HACCP plan and are designed to
 control hazards to feed safety. They should include but are not limited to:
 - o an approved supplier program.
 - procedures for the collection of raw material that explain precautions taken to minimise contamination of raw material by foreign objects such as plastic and metal (these precautions include inspection of raw material and use of metal detectors).
 - cleaning procedures that include but are not limited to methods of cleaning the wet and dry-processing areas of the rendering premises, and a schedule of cleaning and inspection of cleanliness to verify the effectiveness of the cleaning procedures.
 - o procedures for the control of pests, including birds, vermin, and insects.
 - o personnel hygiene procedures.
 - movement of personnel and other traffic between defined areas of the rendering premises.
 - o packaging, storage and labelling of rendered products.
 - calibration of measuring equipment such as processing temperature probes and weigh scales.
 - o maintenance procedures.
 - traceability of raw material and finished product including how raw material intake is recorded so that all raw material can be traced back to suppliers according to quantity and day of supply.
 - o recall and traceability procedures including mock recall.
 - verification of procedures including sampling and testing for Salmonella.
 - procedure for validating heat treatments or other processes including sampling and testing.
 - procedures for compliance with applicable importing country requirements.
 - production and storage areas access and security.
 - o sample collection and storage Salmonella, Clostridium and Retention.
 - o verification and Monitoring Records.
- work instructions for specific production procedures including but not limited to:
 - o all critical control points identified in the HACCP plan.
 - o operation of the heat treatment including size reduction equipment and render vessel/cooker and drier.
 - operation of tallow/liquid phase and solids separation equipment such as press and/or decanter.
 - o operation of mill and milled meal screen.
 - o bagging or bulk load-out of meals.
 - o load outs of tallow and / or fats & oils.
 - other operations as appropriate such as feather hydrolysing and blood coagulating.



14.2 The Quality Management System must include a HACCP plan developed in accordance with the guidelines for the application of HACCP as set out in the Codex Alimentarius General Principles of Food Hygiene.

15. MICROBIOLOGICAL TESTING PROGRAM

OBJECTIVE

Microbiological verification of HACCP. Processed animal protein meals are tested for *Salmonella* and corrective actions taken where required.

- **15.1** One daily sample of approximately 250 g of each processed animal protein meal product must be collected on every production day. Samples must be taken from loadout or bagging operations. If no loadout or bagging occurs, the sample must be collected from bulk storage.
- 15.2 The daily samples from one week's production (the period from Monday to Sunday) must be combined into a weekly composite sample. Equal portions of each daily sample are to be mixed in a clean, sealable bag or container to form this composite. Each weekly composite sample, weighing approximately 250g, must be submitted to an approved laboratory and tested for the presence of Salmonella in a 25g portion using an approved method. If there is no production during the week (Monday to Sunday), the Salmonella testing result must be recorded as "No Production."
- 15.3 The Laboratory reports and records of weekly microbiological testing must be maintained for examination by the Approved Auditor and the Controlling Authority. Records must include the type of processed animal protein meal, the week-ending date, the laboratory report number, and the test result. All test records must be retained for a minimum of two years.
- **15.4** Where any sample is positive for Salmonella, management must:
 - Conduct an immediate review of hygiene procedures, including sampling procedures.
 - Identify and eliminate the source of contamination, and
 - Implement and record corrective action.
- 15.5 If Salmonella is detected in any three samples of any ten consecutive weekly sample periods, this is classified as a breach, and the following steps must be taken:
 - **STEP 1:** Immediately initiate daily testing, continuing until no more than two samples are positive for Salmonella within any ten consecutive daily samples.
 - STEP 2: Notify the Approved Auditor in writing about the breach.
 - **STEP 3:** Once daily testing has resulted in no more than two positive samples in any ten consecutive daily samples, notify the Approved Auditor in writing and

- resume testing with weekly composite samples. *Note: Previous Salmonella detections do not carry forward when weekly testing recommences.*
- **15.6** If the establishment fails to meet the criteria for daily testing specified in 15.5 within 60 days from the initial breach notification, the ARA must be notified, and the ARA may suspend accreditation.
- 15.7 If accreditation is suspended, it may only be resumed after a satisfactory audit and when no more than two out of ten consecutive weekly samples are positive for Salmonella.
- **15.8** Accredited premises must report annual Salmonella testing results when requested by the ARA Executive Officer.

16. STAFF AND TRAINING

OBJECTIVE

All processing staff must understand the principles of hygienic rendering and the hygienic handling of rendered products.

- **16.1** An establishment must employ in a supervisory role at least one member of staff who is accredited in the hygienic production of rendered products.
- **16.2** At least one member of the HACCP team must be accredited in the hygienic production of rendered products.
- 16.3 All rendering production staff must receive training on Hygienic Rendering Practices and Product Safety Culture to a competent standard. Refresher training must be provided to all staff at least once annually, and the method of refresher training must be documented in the training program. Records must be kept of employee training. The refresher training must include training on the operation of critical control points and salmonella collection procedures.
- 16.4 Training must include information on the export from Australia of Australian rendered products and, for the countries to which the rendering premises intend to export their rendered products, training on the applicable importing country requirements for rendered products for that country. This training must be documented and refresher training undertaken at least once annually or in accordance with changes to applicable Importing Country Requirements.
- 16.5 For the rendered products of the rendering premises that must be consumed within Australia, training on the rendering premises' Domestic Customer Requirements must be undertaken. This training must be documented, and refresher training undertaken at least once annually or in accordance with changes to applicable Domestic Customer Requirements.
- **16.6** The ARA Code of Practice and the Australian Standard for the Hygienic Rendering of Animal Products AS 5008 must be available to staff in the rendering premises.



16.7 Reference documents for importing country requirements and domestic customer requirements must be available on-site and made available to applicable rendering staff.

17. ACCREDITATION AND MARKET ACCESS LISTING

The ARA accredits rendering establishments that comply with this Code and the Australian Standard for the Hygienic Rendering of Animal Products (AS 5008).

In addition, the Commonwealth of Australia, through the appropriate Department, lists ARA-accredited establishments for market access. These listings are available to establishments that meet specific market requirements and are subject to audits conducted under the ARA Accreditation and Market Access Program.

An independent certification body appointed by the ARA manages auditing, reporting, and recommendations for accreditation and market access listings. The conditions for accreditation are detailed in the ARA Accreditation Program Rules, which are available in the members' section of the ARA website: www.ausrenderers.com.au.