



NATIONAL ANIMAL WELFARE STANDARDS

AT

LIVESTOCK
PROCESSING
ESTABLISHMENTS

PREPARING
MEAT FOR
HUMAN
CONSUMPTION

1. THE STANDARDS

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1.0 PREFACE

These Standards have been developed to assist industry to continually improve animal welfare outcomes for Australian livestock at Livestock Processing Establishments. These Standards aim to provide support for the existing regulatory framework in the livestock processing industry. They will provide information for all people responsible for the care and management of livestock at processing establishments.

The provisions contained in these animal welfare Standards are based on Model Codes of Practice for the welfare of livestock, international and national guidelines and scientific evidence. In addition, the documentation contains example administrative systems for the purposes of assisting implementation, audit and verification.

Livestock processing establishments address issues associated with food safety and meat quality using quality assurance systems. The addition of animal welfare principles to these systems provides for a more comprehensive and practical approach. Thus, these animal welfare Standards are intended for incorporation into existing livestock processing industry quality assurance programs.

The development of these Standards was a collaborative approach with a range of stakeholders, listed in Appendix 2. Guiding animal welfare principles detailed in Appendix 3 were used to underpin the development of the Standards.

The Australian Meat Industry Council (AMIC), industry representatives and the Animal Welfare Science Centre (AWSC) involved in the development of this project are committed to undertaking an annual review of these Standards.

2.0 MISSION STATEMENT

The overall goal of the meat and livestock industry is to deliver high animal welfare standards that are integrated across the production chain to ensure the welfare of livestock from birth to slaughter. The mission of the livestock processing industry with regard to the welfare of animals is to ensure acceptable animal welfare standards are implemented and effectively verified.

3.0 DEFINITIONS

In these Standards, unless the contrary appears;

Approved Arrangement	when used in relation to a provision of this Standard means the arrangement for the business that is approved by the Controlling Authority. The requirements that comprise the approved arrangement are set out in the Australian Standard for the Hygienic Production and Transportation of Meat for Human Consumption. ¹
Bobby calves	young bovine animals under 6 weeks of age.
Calves	young bovine animals, up to 150kg hot standard carcass weight.
Class	when referring to livestock means a group ('class') of animals defined by their age, size, or sex.
Construction	includes the design, layout, installation, assembly of the premises, equipment and vehicles and the materials of which they are made.
Controlling authority	means the Commonwealth, State or Territory authority that is responsible for the enforcement of the Australian Standard for the Hygienic Production and Transportation of Meat for Human Consumption.
Dressing	means the progressive separation of the body of an animal into a carcass (or sides of a carcass), offal and inedible material. ²
Emergency slaughter	means slaughter by necessity of any animal that: a) has recently suffered traumatic injury or is affected or suspected of being affected by a disease or other abnormality and; b) is in pain or is likely to deteriorate unless it is killed immediately. ²
Epileptiform seizure	the term "seizure" refers to a specific neurological event, in which epileptiform brain wave patterns are shown, such as a tonic-clonic muscular spasms and jerks or unconsciousness. Epileptiform seizures exhibited by stunned animals means no feeling of pain or sensation as the animals are in a state of unconsciousness.

¹ Refer to appendix 1.

² As defined in the Australian Standard for the Hygienic Production and Transportation of Meat and Meat Products for Human Consumption (AS4696-2000)

3.0 DEFINITIONS (CONTINUED)

Extremes of weather	defined as temperature and conditions, eg. rain, hail, snow, wind and heat, that individually or in combination, are likely to predispose livestock to heat or cold stress.
Hoisting	the process of shackling and transferring the animal or animal carcase to the bleed rail.
Humane destruction	the humane destruction of an animal is accomplished by a method that produces rapid unconsciousness (stunning, anaesthetic agent) and subsequent death without pain or distress.
Livestock Processing Establishment	means premises used for the slaughter of livestock and production of meat or meat products for human consumption. ¹
Moribund	defined as an animal that is unable to stand, exhibits signs of distress or insensibility, such as panting, or glassy eye, and with little chance of recovery.
Stunning - Reversible	the stunning of an animal where the animal may regain consciousness unless effectively bled out to cause its death.
Stunning - Irreversible	the stunning of an animal where there is no possibility of the animal regaining consciousness if the procedure is correctly applied.
Slaughter	means the killing of an animal and includes stunning, sticking and bleeding. ²
Sticking	means the severing of blood vessels to induce effective bleeding. ²
Stress	A response by animals that activates their (behavioural, physiological and/or psychological) coping mechanisms.
Stun to stick interval	the time interval between the procedures of stunning and sticking.
Stunning	means the procedure for rendering an animal unconscious and insensible to pain. ²
Sucker lamb	a lamb that has not been weaned, and/or is predominantly fed on its mother's milk.

¹ Refer to appendix 1.

² As defined in the Australian Standard for the Hygienic Production and Transportation of Meat and Meat Products for Human Consumption (AS4696-2000)

3.1 ACRONYMS

In these Standards, the following acronyms are detailed;

CSIRO	Commonwealth Scientific and Industrial Research Organisation.
HACCP	Hazard Analysis Critical Control Points
OIE	Office International des épizooties: World Organisation for Animal Health
SCARM	Standing Committee on Agriculture and Resource Management (now called The Primary Industries Ministerial Council)

4.1 PURPOSE

To provide a framework for the definition of Standards that provide agreed animal welfare outcomes for the processing of Australian livestock.

These animal welfare Standards aim to:

Support the existing standards and guidelines in the livestock processing industry including:

- AS 4696-2002 Australian Standard for the Hygienic Production and Transportation of Meat and Meat Products for Human Consumption. CSIRO publishing web address, under food production: <http://www.publish.csiro.au/1>
- OIE Terrestrial Animal Health Code 2005: Guidelines for the Slaughter of Animals for Human Consumption. OIE World Organisation for Animal Health web address: <http://www.oie.int/>
- Provide consistency with published commercial guidelines, for example the American Meat Institute Foundation's Good Management Practices for Animal Handling and Stunning, 2005 Edition. <http://www.amif.org/FactsandFigures/AMIF-animalwelfare1.htm>.
- Support the Model Code of Practice for the Welfare of Animals at Livestock Slaughtering at Establishments. SCARM Report 79. CSIRO publishing, 2001. <http://www.publish.csiro.au/>¹
- Clearly define the Standards, with associated indicative targets, for incorporation into quality assurance systems.
- Promote the humane and considerate treatment of livestock, and the use of good husbandry and management practices to improve the welfare of livestock at processing establishments.
- Provide information for all people responsible for the care and management of livestock at Livestock Processing Establishments on their responsibilities.
- Provide assurance to customers of meat and meat products from Australian livestock that these Standards are met.

4.2 SCOPE

The scope of the Standards directly concerns the management of livestock from the point of receipt and unloading at the Livestock Processing Establishment to the point of slaughter, for human consumption.

These Standards apply to the major commercially farmed species (excluding poultry) including bovine, ovine, caprine and porcine. These Standards, however, contain general principles that can be applied to other species and animal processing systems (for example knackeries or other slaughtering businesses).

A large number of service providers are involved in the delivery of services to Livestock Processing Establishments. They include livestock producers, livestock transport operators, feed suppliers, stock agents, owners, managers, operators and employees of the livestock processing establishment.

All have a responsibility to ensure that animals are handled and managed in accordance with Australian welfare requirements. This is best achieved through a combination of industry quality assurance systems and compliance with legislation.

¹ Refer to appendix 1. for details on the 'Approval Arrangement' and appendix 4 for welfare considerations.

These Standards make a significant contribution to whole of chain animal welfare outcomes (birth to slaughter) when:

- a) There is a requirement for livestock processors to include provisions for animal welfare with the suppliers of product and services.
- b) There is a requirement for feedback from processors to suppliers on compliance with animal welfare conditions.
- c) There is a legal responsibility to notify relevant authorities of breaches to animal welfare legislation.

Appendix 4 was utilised to identify animal welfare considerations across the production chain and to define the scope of these standards.

4.3 APPLICATION

It is intended that animal welfare in livestock processing establishments be addressed by:

Incorporating these Standards into the establishment's 'Approved Arrangements' (refer to appendix 1).

The Standards are in two documents:

1. The Standards.
2. Working Manual, for the implementation of the Standards; this contains performance indicators, checklist questions, indicative targets and background information (for purposes of implementation and training).

Details of the welfare considerations that are relevant to these Standards are outlined in Appendix 4.

5.0 ROLES AND RESPONSIBILITIES

This section outlines the respective roles and responsibilities of the key participants in the livestock processing industry.

5.1 LIVESTOCK PROCESSORS

The policy objective (as required under clause 3.1 of the Australian Standard for the Hygienic Production and Transportation of Meat and Meat Products for Human Consumption) for a meat business must include animal welfare and a demonstrated commitment of the proprietor to this objective.

The 'Approved Arrangement' (as required under clause 3.1 of the Australian Standard for the Hygienic Production and Transportation of Meat and Meat Products for Human Consumption) must include animal welfare considerations for daily management of livestock on the premises.

It is the responsibility of processors to ensure high animal welfare outcomes utilising principles outlined in a quality management system, thus a system must be in place for verification and review of all practices that impact on animal welfare.

It is the responsibility of processors to ensure that all personnel managing livestock are aware of their legal and moral responsibility to care for the welfare of animal under their control and that all personnel managing livestock are competent and trained for the purpose(s).

There is a requirement for feedback to suppliers (including transporters, feedlot personnel and farmers) on compliance with animal welfare outcomes.

5.2 GOVERNMENT

Various levels of Government have roles of ensuring that animal welfare outcomes are met, and industry has a responsibility to comply with the relevant Government animal welfare requirements.

5.3 EQUIVALENCE

The Standards contain principles that describe how the intended outcomes can be achieved. These principles are also detailed in the form of performance indicators in the Working Manual as a practical tool for livestock processors to integrate and monitor the Standards at their establishments.

It should be noted that there may be a number of practical methods that could be employed to demonstrate that the principles within the Standards are being met. Therefore, the principles outlined in the Standards do not preclude Livestock Processing Establishments from utilising procedures or actions that differ from those described, provided the outcomes are met.

¹ Refer to appendix 1. for details on the 'Approval Arrangement' and appendix 4 for welfare considerations.

6.0 SUMMARY OF ANIMAL WELFARE STANDARDS FOR LIVESTOCK PROCESSING ESTABLISHMENTS

A summary of the Standards for livestock at processing establishments, followed by the outcome intended for each Standard is below:

STANDARD 1. PLANNING AND CONTINGENCIES

Adequate planning is carried out for management of stock on a daily basis and contingencies are in place for emergencies to minimise risks to animal welfare.

STANDARD 2. MAINTENANCE AND DESIGN OF EQUIPMENT AND FACILITIES

Facilities and equipment are designed, maintained and operated to ensure minimal interference or stress is incurred by livestock.

STANDARD 3. STAFF COMPETENCY

All personnel responsible for the management of livestock or handling livestock are competent in their tasks and fulfil the requirements of these Standards.

STANDARD 4. MANAGEMENT AND HUMANE DESTRUCTION OF WEAK, ILL OR INJURED LIVESTOCK

Weak, ill or injured livestock are identified and promptly treated in a humane manner.

STANDARD 5. MANAGEMENT OF LIVESTOCK TO MINIMISE STRESS AND INJURIES

Livestock are routinely managed to minimise stress and injuries.

STANDARD 6. HUMANE SLAUGHTER PROCEDURES

Procedures for humane slaughter, including restraint, stunning and slaughter of livestock, are carried out to minimise stress and in an efficient and effective manner.

¹ Refer to appendix 1. for details on the 'Approval Arrangement' and appendix 4 for welfare considerations.

STANDARD 1. PLANNING AND CONTINGENCIES

Outcome

Adequate planning is carried out for management of stock on a daily basis and contingencies are in place for emergencies to minimise risks to animal welfare

Principles

1. The policy objective for a meat business must include animal welfare and a demonstrated commitment of the proprietor to this objective.
2. The approved arrangement required under clause 3.1 of the Australian Standard for the Hygienic Production and Transportation of Meat and Meat Products for Human Consumption must include animal welfare considerations for daily management of livestock on the premises.¹
3. Appropriate slaughter arrangements and consideration is given to the class and condition of livestock. This will require scheduling prior to livestock arrival.
4. Standard Operating Procedures include contingencies outlining appropriate actions in the event of delay, equipment breakdown, extremes of weather and industrial disputes.
5. All personnel responsible for the management of livestock or handling livestock are competent in their tasks.
6. Sufficient numbers of competent personnel must be available or on-call to conduct the designated tasks.
7. Procedures are in place to ensure all personnel on the premises conduct their activities to minimise risks to animal welfare.
8. A system is in place for verification and review of all practices that impact on animal welfare.
9. Contractual arrangements with livestock suppliers include provisions on animal welfare and feedback is provided on compliance.

¹ Refer to appendix 1. for details on the 'Approval Arrangement' and appendix 4 for welfare considerations.

STANDARD 2. MAINTENANCE AND DESIGN OF EQUIPMENT AND FACILITIES

Outcome

Facilities and equipment are designed, maintained and operated to ensure minimal interference or stress is incurred by livestock.

Principles

1. Facilities are designed to encourage the smooth flow of animals through the establishment.¹
2. Facilities and equipment are designed and maintained for the species, age and class of livestock to be held.
3. Facilities are free from protrusions and other objects that can cause injury, are clean and in good working order.
4. Flooring and ramps must be designed to minimise slipping, falling and injury.
5. Facilities must be available to care for, or to segregate, weak, ill or injured animals.
6. Facilities for water must be available and operational in lairage holding pens.
7. Facilities for feeding are to be available and operational as necessary.
8. Design of facilities must take into account protecting animals from extremes of weather² and provide sufficient space for livestock to be held.
9. Restraining equipment is designed such that animals are restrained effectively for stun.
10. Stunning equipment is effectively stored and maintained, and is fully operational and appropriate for the species, age and class of livestock; back-up equipment must be available and operational.

¹ Australian Standard for the Hygienic Production and Transportation of Meat and Meat Products for Human Consumption (AS4696), part 7, Premises, Equipment and Essential Services.

² Defined as conditions that predispose livestock to heat or cold stress.

STANDARD 3. STAFF COMPETENCY

Outcome

All personnel responsible for the management of livestock or handling livestock are competent in their tasks and fulfil the requirements of these Standards.

Principles

1. All personnel handling livestock at the establishment are competent in the specific tasks.
2. Personnel undergoing training or that are not yet competent must be supervised by a competent person.
3. All personnel handling livestock are able to identify and respond to behaviours that indicate a problem for an animal and injuries and signs of distress.
4. All personnel handling livestock who use implements and/or dogs to move animals are competent in their appropriate use.
5. Personnel involved in stunning are competent to recognise the effectiveness of the procedure.
6. Personnel involved in stunning are competent in the use of backup equipment.
7. Personnel competence in humane destruction are available as required.

STANDARD 4. MANAGEMENT AND HUMANE DESTRUCTION OF WEAK, ILL OR INJURED LIVESTOCK

Outcome

Weak, ill or injured livestock are identified and promptly treated in a humane manner.

Principles

1. Weak, ill or injured livestock are identified upon arrival, assessed by a competent person and appropriate action is promptly taken.
2. For animals identified for humane destruction or emergency slaughter, the procedure is promptly carried out.
3. Moribund animals must be euthanased on the spot and without delay.

STANDARD 5. MANAGEMENT OF LIVESTOCK TO MINIMISE STRESS AND INJURIES

Outcome

Livestock are routinely managed to minimise stress and injuries.

Principles

1. Livestock should be penned according to species and class wherever possible. If mixing animals, management of aggressive behaviour within unfamiliar animals must be carried out to ensure their welfare.
2. Animals should be penned with sufficient space to move freely, lie down and to access the watering and feeding facilities as required.
3. Livestock are regularly observed by personnel that can identify normal and abnormal behaviours and appearance and take appropriate action if welfare is actually or potentially compromised.
4. Livestock are moved throughout the facility in a calm and quiet manner with appropriate use of implements and dogs for the species and class of livestock to ensure stress is minimised and injuries are avoided.
5. All dogs are trained and are to be muzzled when working.
6. Care must be taken when washing animals with high-pressure hoses to avoid sensitive areas of the animals and to minimise cold stress.

STANDARD 6. HUMANE SLAUGHTER PROCEDURES

Outcome

Procedures for humane slaughter, including restraint, stunning and slaughter of livestock, are carried out to minimise stress and in an efficient and effective manner.

Principles

1. Livestock are effectively restrained with minimal stress.
2. Livestock are effectively stunned with appropriate equipment for the species and class of livestock.
3. Where reversible stunning is used, sticking must be applied in a manner so that animals do not regain sensibility.
4. Procedures must be in place to monitor that the animal is effectively stunned and confirmed insensible; corrective action is immediately taken if required.
5. Animals must be effectively stunned before sticking commences unless otherwise approved by a controlling authority.
6. Hoisting must not commence until the animal is confirmed insensible.
7. Dressing must not commence until the animal is permanently insensible.

APPENDIX 1. AUSTRALIAN STANDARD REQUIREMENT FOR APPROVED ARRANGEMENT

All Australian livestock processing establishments who produce meat for human consumption are required to comply with the requirements specified in The Australian Standard for the Hygienic Production and Transportation of Meat and Meat Products for Human Consumption (AS 4696:2002) (The Australian Meat Standard).

The Australian Meat Standard requires Establishments to develop and implement an Approved Arrangement which covers each stage of production and is underpinned by a Hazard Analysis Critical Control Points (HACCP) based process control framework.

The Approved Arrangement must also document management and production practices including:

- The policy objectives of the Establishment.
- The organisational structure, the provision of resources and training of personnel.
- The system that is in place to verify that the undertakings made by the Establishment are met and the results of the verification activities are documented.
- The corrective and preventative measures that are to be implemented should undertakings not be met.
- The undertaking of internal audit and management reviews.

It is intended that the 'National Animal Welfare Standards for Livestock Processing Establishments Preparing Meat for Human Consumption' are implemented by Establishments via incorporation into the operational framework established by the 'Approved Arrangement'.

APPENDIX 2. THE MANAGEMENT GROUP

The Standards were developed by a management group comprised of representatives from:

- Animal Welfare Science Centre
- Animals Australia
- AUS-MEAT Limited
- Australian Livestock Transport Association
- Australian Meat Industry Council
- Australian Pork Limited
- Australian Quarantine Inspection Service
- Coles Supermarkets Pty Ltd.
- Dairy Australia
- Meat and Livestock Australia
- Queensland Department of Primary Industries
- Queensland Rail
- Royal Society for the Prevention of Cruelty to Animals Victoria
- Victorian Department of Primary Industries
- Woolworths Limited.

CORRESPONDING MEMBERS

- Temple Grandin, University of Colorado.
- Australian Wool Innovation

APPENDIX 3. GUIDING PRINCIPLES

The following guiding principles were utilised by the management group in the development of these Standards:

- The health and welfare of animals is a primary consideration at all stages of livestock production.
- The critical relationship between animal welfare and animal health is recognised.
- The operation of the livestock processing establishment needs to be conducted in a manner in which accountabilities and responsibilities are clearly defined and met.
- The animal health and welfare considerations and arrangements that apply to the livestock processing industry are consistent with those applying to the wider livestock industries for on-farm and transport activities.
- The overall goal of industry is to deliver high animal welfare standards that are integrated across the production chain to ensure the welfare of livestock from birth to slaughter.
- The internationally recognised ‘five freedoms’ provide valuable guidance on animal welfare.
 1. Freedom from hunger and thirst,
 2. Freedom from discomfort,
 3. Freedom from pain, injury and disease,
 4. Freedom to express normal behaviour,
 5. Freedom from fear and distress.
- The scientific assessment of animal welfare involves diverse elements which need to be considered concurrently. Selecting and weighting of these elements often involves value-based assumptions which should be made as explicit as possible.
- All participants in the livestock processing industry with responsibilities for animals are responsible for the health and welfare of animals in their care.
- All person(s) managing livestock have a legal and moral responsibility to care for the welfare of animals under their care and control.
- The use of animals carries with it a duty to ensure the welfare of such animals to the greatest extent practicable.
- Animal welfare considerations should be included in quality assurance programs.

APPENDIX 4. FLOW DIAGRAM OF WELFARE CONSIDERATIONS POST FARM GATE

Represents direct responsibilities for the livestock processing industry.

Represents indirect or secondary responsibilities for the livestock processing industry.

Process	Step	Welfare considerations
Farm/saleyard	1	<ul style="list-style-type: none"> • Fitness and health of stock selected for transport • Design and maintenance of holding and loading facilities • Animal handling • Demonstrated staff competencies
Transport	2	<ul style="list-style-type: none"> • Fitness of stock for transport • Vehicle design, cleanliness, maintenance and condition • Stocking density • Time off feed and water • Transport duration • Surveillance of livestock • Handling livestock at rest stops or depots during the journey • Contingencies for emergencies • Humane destruction during transport • Demonstrated staff competencies
Arrival of stock and unloading	3	<ul style="list-style-type: none"> • Planning and scheduling for slaughter • Unloading of livestock at the plant • Identification and treatment of weak, ill or injured stock upon arrival • Humane destruction upon arrival • Facilities for unloading • Operation, maintenance and cleaning of facilities and equipment • Demonstrated staff competencies
Lairage and holding areas	4	<ul style="list-style-type: none"> • Access to water • Stocking density • Shelter • Mixing, aggression and animal behaviour • Surveillance of livestock and ante-mortem inspections • Provision of feed for livestock to be held • Humane destruction • Animal cleanliness • Maintenance and design of facilities • Operation, maintenance and cleaning of facilities and equipment • Contingencies for daily management and emergencies • Demonstrated staff competencies
Movement to the slaughter floor	5	<ul style="list-style-type: none"> • Operation, maintenance and cleaning of facilities and equipment • Handling and drafting of animals • Animal behaviour • Demonstrated staff competencies
Stunning	6	<ul style="list-style-type: none"> • Operation, maintenance and cleaning of facilities and equipment for stunning and restraint • Effective stunning • Contingencies including back-up stunning • Demonstrated staff competencies
Slaughter	7	<ul style="list-style-type: none"> • Effective and humane slaughter procedures • Maintenance and design of slaughter equipment and facilities • Contingencies for emergencies • Feedback on carcass quality • Demonstrated staff competencies

APPENDIX 5. REFERENCES

The following references were used:

- “Operational Guidelines for the welfare of animals at abattoirs and slaughterhouses”, (1995), Australian Quarantine and Inspection Service, The Australian Government Department of Agriculture, Fisheries and Forestry.
- “Recommended Animal Handling Guidelines for Meat Packers” and Good Management Practices for Animal Handling and Stunning” guidelines developed by Temple Grandin and published by the American Meat Institute (2005), were integrated into these Standards to assist in aligning Australian and International requirements. These guidelines form the basis for the Standards followed by a number of International Restaurant Chains, Retailers and Livestock Processing Establishments.
- OIE Publication “Guidelines for the Slaughter of Animals for Human Consumption” and “Guidelines for the Humane Killing of Animals for Disease Control Purposes.”
- European Food Safety Authority Report (AHAW/04027). “Welfare Aspects of Animal Stunning and Killing Methods”. Scientific Report of the Scientific Panel for Animal Health and Welfare on a request from the Commission related to welfare aspects of animal stunning and killing methods. June 2004.
- Model Code of Practice for the Welfare of Animals: Livestock at Slaughtering Establishments, CSIRO publishing, 2001.
- Model Code of Practice for the Welfare of Animals: Cattle, CSIRO publishing, November 2004.
- Model Code of Practice for the Welfare of Animals: The Sheep, CSIRO publishing, November 1991.
- Model Code of Practice for the Welfare of Animals: Land Transport of Cattle, CSIRO publishing, 2000.
- Model Code of Practice for the Welfare of Animals: Land Transport of Sheep, CSIRO publishing, Draft 2005.
- Model Code of Practice for the Welfare of Animals: Land Transport of Pigs, CSIRO publishing, 1998.
- Model Code of Practice for the Welfare of Animals: Pigs, CSIRO publishing, 1998.
- Model Code of Practice for the Welfare of Animals: The Goat, CSIRO publishing, 1991.

Other references utilised in the development of these Standards include national and international quality assurance requirements, recommendations and scientific papers and reviews.

ACKNOWLEDGMENTS

We are extremely grateful to the members of the management group for their contribution to the development of these Standards and to other industry representatives who provided comment and support. This project was financially supported by the Australian Meat Industry Council (AMIC) and the Victorian Government's Naturally Victorian Initiative.

