



Industry Animal Welfare Standard

for Livestock Processing Establishments
Preparing Meat for Human Consumption

IMPLEMENTATION GUIDE

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Introduction

This document has been developed to provide guidance on the implementation of the **Industry Animal Welfare Standard for Livestock Processing Establishments Preparing Meat for Human Consumption** ('the Standard'). The Standard is arranged as shown in Figure 01 below.

Figure 01: Standard content and explanation of the information covered in each section.

Standard Content	Information
1. Scope	The Standard provides requirements for the commercial processing of cattle (including calves), sheep (including lambs), pigs, goats, buffalo, deer and horses in Australian processing establishments, from receipt at the processing establishment through to (and including) slaughter. The scope of the Standard is summarised as a series of process steps in Figure 02, which illustrates the main animal welfare considerations and the areas of responsibility for the processing establishment.
2. Normative references	The Standard also refers to several normative documents in such a way that some or all of their content constitutes requirements of the Standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies. • Australian Animal Welfare Standards and Guidelines - Land Transport of Livestock • Australian Standard for the Hygienic Production and Transport of Meat and Meat Products for Human Consumption • Model Code of Practice for the Welfare of Animals - Livestock at Slaughtering Establishments. SCARM Report 79 Additional informative documents: The Standard also provides consistency with international guidelines, including the WOAHP Terrestrial Animal Health Code 2019: Guidelines for the Slaughter of Animals for Human Consumption. It is also aligned with published industry guidelines, for example, the North American Meat Institute's Recommended Animal Handling Guidelines & Audit Guide: A Systematic Approach to Animal Welfare (2021).
4. Management requirements	Contains subsections covering the following: • Management system • Document control • Performance evaluation and improvement - Performance evaluation - Internal audit - Non-conformities, correction and corrective actions - Management review
5. Resource requirements	Contains subsections covering the following: • Human resource management and competencies • Physical resources

Standard Content	Information
6. Management and care of livestock	Contains subsections covering the following: • Receiving of livestock at the establishment • Livestock handling • Daily management of livestock Identification and management of weak, ill or injured livestock
7. Humane stunning and sticking processes	Contains subsections covering the following: • Restraint • Stunning procedures • Sticking procedures
Annexes	Contains the following sections: • Documented procedures • Personnel competencies • Fitness for transport • Unacceptable practices and procedures
Bibliography	Reference documentation relevant to the Standard.

Figure 02: Flow diagram of animal welfare considerations.

Steps 3-7 are the direct responsibility of the processing establishment

Process	Step	Welfare Consideration
Farm/Saleyard	1	• Fitness and health of stock selected for transport • Design and maintenance of holding and loading facilities • Stocking density • Animal handling • Demonstrated staff competencies • Time off feed and water • Emergency preparedness
Transport	2	• Fitness and suitability of livestock for transport • Vehicle design, cleanliness, maintenance and condition • Demonstrated staff competencies • Stocking density and mixing of livestock • Time off feed and water • Transport duration and conditions • Surveillance of livestock • Handling livestock at rest stops or depots during the journey • Humane killing during transport • Emergency preparedness
Arrival of stock and unloading	3	• Planning and scheduling for slaughter • Design, operation and maintenance of facilities and equipment for unloading • Demonstrated staff competencies • Unloading of livestock at the plant • Identification, treatment and reporting of weak, ill or injured stock upon arrival • Emergency slaughter and humane killing • Emergency preparedness
Lairage and holding areas	4	• Design, operation and maintenance of lairage and holding facilities and equipment • Demonstrated staff competencies • Access to water and feed • Provision of shelter • Stocking density and mixing of livestock • Inspection of livestock • Emergency slaughter and humane killing • Animal cleanliness for processing • Emergency preparedness

Process	Step	Welfare Consideration
Movement to the slaughter floor	5	• Design, operation and maintenance of handling facilities and equipment • Demonstrated staff competencies • Livestock handling • Emergency preparedness
Stunning	6	• Design, operation and maintenance of facilities and equipment for restraint and stunning • Demonstrated staff competencies • Livestock handling during restraint and stunning • Effective stunning procedures • Emergency preparedness
Slaughter	7	• Design, operation and maintenance of slaughter facilities and equipment • Demonstrated staff competencies • Effective slaughter procedures • Emergency preparedness

Terms and definitions

For the purposes of the Standard and this guidance document, the following terms and definitions apply.

Term	Definition
3.1 AAWCS	Australian Livestock Processing Industry Animal Welfare Certification System.
3.2 Competency	The demonstrated knowledge, skills, attitude and behaviour to effectively undertake a task.
3.3 Compliance requirements	Any local, regional, national and international: a) statutory or regulatory requirements (including any necessary certificates, permits, licences, permissions, consents); b) requirements in treaties or conventions; and c) contractual requirements.
3.4 Correction	Action to eliminate an identified nonconformity. SOURCE: ISO 9000:2015, 3.12.3
3.5 Corrective action	Action to eliminate the cause of a nonconformity and prevent recurrence. <i>Note 1 to entry: There can be more than one cause for a nonconformity.</i> <i>Note 2 to entry: Corrective action is taken to prevent recurrence whereas preventive action is taken to prevent occurrence.</i> SOURCE: ISO 9000:2015, 3.12.2
3.6 Documented information	Information required to be controlled and maintained by an establishment.
3.7 Electric goad	A low voltage (<50 volts) or commercially manufactured battery-operated device designed and used to encourage livestock to move by administering an electrical stimulus.

3.8 Emergency slaughter	Slaughter by necessity (i.e., in the interest of animal welfare) 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. Livestock, in relation to the above, would normally undergo an assessment as to the fitness for human consumption.
3.9 Fall	Occurs when an animal loses an upright position suddenly in which a part of the body other than the limbs touches the ground. SOURCE: NAMI Recommended handling guidelines and audit guide: A systematic approach to animal welfare. January 2021.
3.10 Humane	In a manner that prevents avoidable pain, suffering, or distress.
3.11 Insensibility	Synonymous with unconsciousness.
3.12 Killing	Any procedure which causes the death of an animal.
3.13 Lairage	A designated holding area of the processing establishment where livestock are kept before slaughter.
3.14 Livestock processing establishment ('the establishment')	Premises used for the processing of livestock and production of meat or meat products for human consumption.
3.15 Nonconformity	Non-fulfilment of a requirement or failure to demonstrate fulfilment of a requirement.
3.16 Restraint	The application to an animal of any procedure designed to restrict its movements.
3.17 Slaughter	The killing of an animal; includes stunning, sticking and bleeding.

3.18 Sticking	The severing of blood vessels to induce effective bleeding.
3.19 Stocking density	The number of animals per unit area, with the area usually measured in m ² .
3.20 Stunning	The procedure for rendering an animal unconscious and insensible to pain. <i>Note 1: Irreversible stunning - where there is no possibility of the animal regaining consciousness.</i> <i>Note 2: Reversible stunning - where the animal may regain consciousness unless followed by an effective method to cause death.</i>
3.21 The Standard	This Standard, that is the Industry Animal Welfare Standard – Livestock Processing Establishments Preparing Meat for Human Consumption (5 th Edition).
3.22 Training	Formal and informal vocational education and development.
3.23 Unconsciousness	State of unawareness (loss of consciousness) in which there is temporary or permanent disruption to brain function, during which the animal does not feel pain, suffering or distress.
3.24 Vocalisation	Moo or bellow in cattle as a consequence of active handling in the race or crowd pen or during restraint (e.g., in the stun box). Squeal in pigs, which is an extended sound produced with an open mouth, indicating excitement, fear, or pain. Squealing that occurs when pigs root under each other or jump on top of each other is counted if provoked by electric goads, yelling, poking, or hitting the pigs. SOURCE: NAMI Recommended handling guidelines and audit guide: A systematic approach to animal welfare. January 2021.

4 Management

REQUIREMENT	GUIDANCE		
4.1 Management system	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
4.1.1 The establishment shall establish, implement, and maintain a management system that enables the consistent fulfilment of the requirements in this Standard.	Evidence must demonstrate that the establishment has established, implemented and maintained a management system. Types of evidence can include: • Verbal description and examples of what makes up the management system. • Documented information about the management system, e.g., documented processes (See 4.1.2). • Management system manual and/or a process diagram/list showing the main processes of the establishment and how they interrelate. • Details of the Approved Arrangement with identification of processes.	The required outcome is for the establishment to demonstrate that it has a management system that addresses the requirements in the Standard. In the Standard, the establishment's management system is a set of interacting processes that are undertaken to achieve objectives. Processes can be made up of a series of activities that are undertaken using defined methods. The activities and methods can be taught through training and may be prescribed in the form of standard operating procedures (SOPs), task sheets, etc. or other forms of documented information such as records. The methods used should be repeatable and result in the same outcome each time they are performed. Note: Under the Australian Standard for the Hygienic Production and Transportation of Meat and Meat Products (AS4696), as referenced under Commonwealth, State and Territory law, it is the responsibility of the occupier to develop, implement, maintain and have approved their arrangement to meet food safety and product integrity requirements and, in the case of exports, facilitate market access. This is a quality management framework.	<i>Ref [1] Definition of process</i> <i>Ref [2] Approved Arrangement guidance - Quality Management Framework</i> <i>Ref [3] Export Control (Meat and Meat Products) Rules 2021</i> <i>Ref [4] Australian Standard AS 4696 - Section 3</i>

REQUIREMENT	GUIDANCE		
4.1 Management system	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
4.1.2 The management system shall include at least the following: a) identification of compliance requirements associated with processing activities as related to animal welfare; b) identification, monitoring and control of processes used to carry out processing activities as related to animal welfare, including those in Annex A; c) management commitment, accountability and allocation of responsibilities; d) promotion of a positive animal welfare culture that supports awareness, accountability and continuous improvement in animal welfare, including: i) visible leadership commitment to animal welfare; ii) open communication and reporting of animal welfare concerns; and iii) recognition and reinforcement of good welfare practices.	Evidence must demonstrate that the establishment's management system includes items identified in 4.1.2. Evidence of a) can include: • Log of relevant compliance documentation. • Details of Approved arrangement, including identification of relevant animal welfare compliance requirements. Evidence of b) can include: • List/diagram of main processes. • Flow charts. • Production records. • Traceability records. • Internal audit reports. • Corrective action reports. • Work instructions and procedures. • Traceability and transport records. • Essential documented procedures as listed in Annex A. Evidence of c) can be demonstrated by the fulfilment of 5.1 <i>Human resource management and competencies</i>. Examples of evidence	See information under 4.1.1. The required outcome is for the establishment to demonstrate the management system includes list items a)-g). The management system provides a platform for setting performance measures, monitoring, and improving performance over time. Through monitoring and reporting, it is expected that the establishment can control its operations and make adjustments when outcomes are not optimal and nonconformities arise. With the addition of internal audits and management review, the establishment can ensure issues are identified, explored, resolved, and recurrence is prevented by undertaking corrective actions. It is important that decisions affecting animal welfare have oversight from senior management or their representatives. It is important that animal welfare is embedded in the culture of the organisation, not just documented in procedures. A positive animal welfare culture means that leadership and staff actively value, support and prioritise welfare outcomes. It should be visible in day-to-day behaviour and decision-making. Allocation of responsibilities can be demonstrated by having a clear organisational structure with defined roles and responsibilities and communicating that to personnel. Essential documented procedures for the management of livestock are shown in Annex A. These include contingency procedures to prevent and/or mitigate possible risks to animal welfare. These may include:	<i>Ref [2] Approved Arrangement guidance - Contains information on the identification and use of standard operating procedures</i> <i>Ref [4] Australian Standard AS 4696 - Section 3</i> <i>Ref [13] NAMI Recommended handling guidelines and audit guide</i>

REQUIREMENT	GUIDANCE		
e) resource management, including human resource management and competence (Annex B); f) improvement, including internal audit and management review processes and systems for implementing corrective action; and g) documented information that is necessary to demonstrate consistent fulfilment of the requirements in this Standard. NOTE: The extent of the documented information for a management system can differ between establishments based on their size and the scope and complexity of its meat processing activities. Documented information includes video surveillance system (VSS) data.	can include: • Organisational charts • Delegation register • Job descriptions • Duty statements • Communication to personnel • Allocation of tasks • Meeting minutes. Evidence of d) can include: • Policy statements or management communications that prioritise animal welfare. • Records of leadership involvement in welfare meetings, audits or reviews. • Minutes showing welfare is discussed at management level. • Resource allocation (for example, training budgets or welfare improvement initiatives). • Observations of leadership behaviour that demonstrates commitment (for example, site walk-throughs focusing on welfare). Evidence of e) can include: • Contracts • Letters of appointment • Personnel files	Delays to scheduled slaughter; equipment breakdown and failure; extreme weather; fire or floods; out-of-hours management of livestock; industrial disputes. Ref [13] includes recommendations for developing an emergency livestock management plan. Documented information is a defined term in the Standard. It means: <i>‘Information required to be controlled and maintained by an establishment.’</i> Documented information is simply information that is needed to consistently run the establishment and its operations, and to record and improve its performance. This can include video surveillance (VSS) footage.	

REQUIREMENT	GUIDANCE	
	• Training records Evidence of f) can be demonstrated by the fulfilment of subclauses 4.3.2 Internal audit, 4.3.3 <i>Nonconformities, correction and corrective actions</i> and 4.3.4 <i>Management review</i>. Examples of evidence include: • Internal audit schedule • Internal audit reports • Corrective action records • Management review minutes • Customer/other complaint log Evidence of g) can include: Documented information about the management system. This can be in any format, including: printed procedures (in a manual) or electronically displayed on an organisational intranet; printed log sheets and records; fillable forms or records available in folders, or electronically within a computer system, or on capture and storage devices such as tablets or smartphones, etc. Documented information, including operational procedures and training information, can also be in the form of pictures, videos (for example, VSS footage), recorded instructions, etc.	

REQUIREMENT	GUIDANCE		
4.2 Document control	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
4.2.1 When creating and updating documented information, the establishment shall ensure appropriate: a) identification and description (e.g. a title, date, author, reference number); b) format (e.g. language, software version, graphics) and media (e.g. paper, electronic); and c) review and approval for suitability and adequacy.	Often, establishments will have a procedure for controlling documents and will use standard formats for their documented information. Types of evidence can include: - Controlled documents master list that keeps a list of all controlled documents and a record of the latest authorised versions; and - Examples of controlled documented information and approvals.	The required outcome is for the establishment to demonstrate that it controls documented information. Documented information (see 4.1.2 above) contains the information that runs the establishment and its operations. It is therefore critical that it is controlled to ensure personnel have the correct instructions, procedures and checklists whenever they need them (for example, if visual instructions are used in lairage, etc.). This also applies in the case of records, especially those required for compliance purposes and monitoring performance.	<i>Ref [2] Approved Arrangement guidance - Part 1 System Support (Document Control)</i> <i>Ref [3] Export Control (Meat and Meat Products) Rules 2021</i>
4.2.2 Documented information required by the management system and by this Standard shall be controlled to ensure that: a) it is available and suitable for use; and b) it is adequately protected (e.g. from improper use, loss of confidentiality or loss of integrity).	Types of evidence can include: - Demonstrating that personnel have access to controlled documented information. - Examples of version control and issuance. - Demonstrating that VSS footage is adequately retained and protected from improper use, loss of confidentiality or loss of integrity.	See above explanation 4.2.1	<i>Ref [2] Approved Arrangement guidance - Part 1 System Support (Document Control)</i> <i>Ref [3] Export Control (Meat and Meat Products) Rules 2021</i>

REQUIREMENT	GUIDANCE		
4.2 Document control	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
4.2.3 For the control of documented information, the establishment shall address: a) distribution, access, retrieval and use; b) storage and preservation; c) control of changes (e.g. version control); and d) retention and disposition.	Types of evidence can include: • Examples of version control and issuance. • Examples of how documented information is stored, saved, replaced and deleted. • Examples of version control and issuance.	See above explanation 4.2.1	<i>Ref [2] Approved Arrangement guidance - Part 1 System Support (Document Control)</i> <i>Ref [3] Export Control (Meat and Meat Products) Rules 2021</i>
4.3 Performance evaluation and improvement			
4.3.1 Performance evaluation 4.3.1.1 The establishment shall identify, monitor and measure performance indicators.	Types of evidence can include: • Identification of measurable parameters for various processes. This may include the identification of ‘trigger’ or ‘target’ levels that require corrective action when targets are not met or when a trigger is exceeded. • Demonstration of monitoring activities and equipment. • Monitoring records, with corrective actions where targets are not fulfilled.	The required outcome is for the establishment to demonstrate that it has identified performance indicators and uses them to monitor and measure performance. The performance indicators should be related to animal welfare outcomes and enable the requirements of 4.3.1.2 to be achieved. The Standard identifies a number of mandatory performance indicators in requirements 6.2.2, 6.2.3, 7.2.2, and 7.2.4. Annex A requires the development of a documented procedure for animal welfare monitoring. This document can be used to identify animal welfare performance indicators. It is important that the use of the VSS footage as part of animal welfare monitoring is included in the documented procedure. Appendix 01 of this guidance describes animal welfare monitoring procedures and associated performance indicators.	<i>Ref [2] Approved Arrangement guidance - provides information on the identification and use of performance indicators to address management practices, hygienic operations and other requirements.</i> <i>Ref [Appendix 01 of this guidance document]</i>

REQUIREMENT	GUIDANCE		
4.3 Performance evaluation and improvement	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
4.3.1.2 The establishment shall analyse its performance to identify and evaluate: a) the achievement of indicators; b) conformity with the requirements of this Standard; c) areas of risk; d) opportunities for improvement; e) the performance of personnel and suppliers; and f) customer satisfaction. NOTE: Analysis of performance includes the monitoring and analysis of video surveillance system (VSS) data as per 5.2.10.	Types of evidence can include: - Records of analysis of the results of monitoring, including identification of when parameters are being achieved or when the results are out of specification. - Minutes/meeting notes/follow up emails. - Personnel records e.g. attendance records. - Risk analysis/risk assessment register. - VSS monitoring records and analysis of data. - Demonstration and description of actions that are taken to correct or improve performance, including examples of where monitoring and analysis has led to issues being investigated and corrective action being used to resolve the issues. - Corrective action records.	The required outcome is for the establishment to demonstrate that it defines performance objectives and then monitors and analyses its performance. The decision on how it defines, monitors and analyses the results is for the establishment to determine. What is important, however, is for the establishment to demonstrate that it undertakes monitoring and analysis to meet any compliance requirements and conform with the requirements in the Standard, including identification and management of risk. This can be linked back to the main processes that the establishment has identified under 4.1.2, and the selection of some key parameters in each process that must be monitored and analysed. The last part of monitoring and analysis is to show that action is actually undertaken when things are not right (i.e. nonconformities and opportunities for improvement).	<i>Ref [1] Definition of performance, risk and improvement</i> <i>Ref [2] Approved Arrangement guidance - provides information on the identification and use of performance indicators to address management practices, hygienic operations and other requirements</i> <i>Ref [Appendix 01 of this guidance document]</i>

REQUIREMENT	GUIDANCE		
4.3 Performance evaluation and improvement	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
4.3.2 Internal audit The establishment shall: a) plan, establish and maintain an internal audit programme including the frequency, methods, responsibilities, planning requirements and reporting, which shall take into consideration the importance of the processes concerned and associated risks to animal welfare, customer feedback, changes affecting the establishment and the results of previous internal audits and external evaluations; b) follow the audit criteria and scope for each internal audit; c) select competent auditors and conduct audits in a manner that ensures objectivity and impartiality; d) report the results to relevant management; e) take necessary and timely corrective action; and f) retain documented information as evidence of the implementation of the internal audit programme and the audit results.	Types of evidence can include: • Documented internal audit procedure and programme / schedule. • Management reports. • Completed internal audit templates or checklists. • Internal audit reports. • Demonstration of an internal audit taking place. • Email / meeting minutes. • Corrective action records. • Examples of how findings have resulted in corrective actions to resolve the root cause of the issue. • Training / qualifications of internal auditors.	The required outcome is for the establishment to demonstrate that it undertakes internal audits in accordance with a predetermined and planned internal audit programme. An internal audit programme describes how and when internal audits are to be conducted, and by whom. Internal audits are an important feature of a management system approach to achieving organisational objectives. Internal audits should be carried out by personnel internal to the establishment (however, they cannot audit their own work). It is important that internal auditors are competent; that is, they can perform audits and have an understanding of animal welfare, the Standard and the processes being audited.	<i>Ref [1] Definition of audit</i> <i>Ref [2] Approved Arrangement guidance - Part 1 System Support (Internal Audit)</i> <i>Ref [4] Australian Standard AS 4696 - Section 3.9</i> <i>Ref [5] Guidelines for auditing management systems</i> <i>Ref [6] ISO 9001 Auditing Practices Group guidance on effective use of ISO 19011</i> <i>Ref [7] ISO 9001 Auditing Practices Group guidance on internal audit</i>

REQUIREMENT	GUIDANCE		
4.3 Performance evaluation and improvement	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
4.3.3 Nonconformities, correction and corrective actions 4.3.3.1 When a nonconformity occurs, the establishment shall: a) correct the nonconformity; b) determine the cause of the nonconformity and ways to prevent its recurrence; c) undertake, and review the effectiveness of, corrective action; and d) make any necessary changes to the management system.	Types of evidence can include: • Completed nonconformity and corrective action forms. • A list or register of nonconformities and corrective (follow-up) actions. • Examples of how findings have resulted in corrective actions to resolve the root cause of the issue. • Root cause analysis reports.	The required outcome is for the establishment to demonstrate that it undertakes corrective action when nonconformities arise. The term ‘correction’ means: ‘the action taken to eliminate a nonconformity.’ [Ref 1] The term ‘corrective action’ means: ‘the action taken to eliminate a nonconformity and prevent recurrence’. [Ref 1] This is the current use of these terms. Establishments may be more familiar with the terms ‘corrective action’ and ‘preventive action’, which are synonymous with these terms.	<i>Ref [1] Definition of correction and corrective action</i> <i>Ref [2] Approved Arrangement guidance - Part1 System Support (Corrective Action)</i> <i>Ref [3] Export Control (Meat and Meat Products) Rules 2021</i> <i>Ref [4] Australian Standard AS 4696 - Section 3.7 and 3.8</i> <i>Ref [5] Guidelines for auditing management systems</i> <i>Ref [8] ISO 9001 Auditing Practices Group guidance on nonconformity – documenting</i> <i>Ref [9] ISO 9001 Auditing Practices Group Guidance on nonconformity – review and closing</i>

REQUIREMENT	GUIDANCE		
4.3 Performance evaluation and improvement	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
4.3.3.2 Corrective actions shall be appropriate to the effects of the nonconformities encountered.	Types of evidence can include: • Completed nonconformity and corrective action forms. • A list or register of nonconformities and corrective (follow-up) actions. • Examples of how findings have resulted in corrective actions to resolve the root cause of the issue.	See above explanation 4.3.3.1	<i>Ref [1] Definition of nonconformity and corrective action</i>
4.3.3.3 The establishment shall retain documented information as evidence of: a) the nature of the nonconformity and the corrective action taken; and b) the results of any corrective action.	Types of evidence can include: • Completed nonconformity and corrective action forms. • A list or register of nonconformities (including the date that the nonconformity occurred or was identified), corrective (follow-up) actions and results.	See above explanation 4.3.3.1	<i>Ref [1] Definition of documented information, nonconformity and corrective action</i> <i>Ref [2] Approved Arrangement guidance - Part 1 System Support (Document Control)</i> <i>Ref [4] Australian Standard AS 4696 - Section 3.6, 3.7 and 3.8</i>

REQUIREMENT	GUIDANCE		
4.3 Performance evaluation and improvement	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
4.3.4 Management review 4.3.4.1 Management shall review the establishment's management system at least annually.	Types of evidence can include: • Management review minute/meeting record/follow-up emails. • Demonstration of a management review taking place.	The required outcome is for the establishment to demonstrate that it undertakes a management review at least annually. Management review is a formal opportunity for organisational management to evaluate establishment performance, think about the future, and plan for adjustments or improvements. During the evaluation of performance, the management review needs to consider the outcomes of Section 4.3.1.2, including the monitoring and analysis of video surveillance system (VSS) data as outlined in Section 5.2.10. Sometimes it is done as part of an annual strategic review or planning exercise. It is important that the establishment demonstrates that it is being done and covers the inputs (4.3.4.2) and outputs (4.3.4.3). It is important that the management review involves senior management or their representatives who have the authority to plan and initiate future improvements, etc.	<i>Ref [2] Approved Arrangement guidance - Part 1 System Support (Management Review)</i> <i>Ref [4] Australian Standard AS 4696 - Section 3.9</i> <i>Ref [10] ISO 9001 Auditing Practices Group guidance on policy, objectives and management review</i>

REQUIREMENT	GUIDANCE		
4.3 Performance evaluation and improvement	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
4.3.4.2 The review shall include the following: a) the status of actions from previous management reviews; b) changes in external and internal issues that are relevant to the management system; c) results of internal and external evaluations; d) nonconformities and corrective actions; e) customer satisfaction; and f) potential opportunities for continuous improvement.	Types of evidence can include: • Management review minute/meeting record/follow-up emails. • Demonstration of a management review taking place.	Also see the above explanation 4.3.4.1. The required outcome is for the establishment to demonstrate that the management review covers list items a) - f). Customer satisfaction can include management of customer feedback, complaints or third-party audit results.	<i>Ref [1] Definition of audit, nonconformity, corrective action and improvement</i> <i>Ref [2] Approved Arrangement guidance - Part 1 System Support (Management Review) provides examples of management review activities, including conduct of management review, examples of inputs and recording of outputs.</i> <i>Ref [3] Export Control (Meat and Meat Products) Rules 2021</i> <i>Ref [10] ISO 9001 Auditing Practices Group guidance on policy, objectives and management review</i>
4.3.4.3 The output from the management review shall include: a) identification of risks; b) opportunities for improvement; and c) the need for any changes to the management system.	Types of evidence can include: • Management review minute/meeting record/follow-up emails. • Demonstration of a management review taking place.	See the above explanation 4.3.4.1. The required outcome is for the establishment to demonstrate the outputs from the management review include list items a) - c).	

5 Resource requirements

REQUIREMENT	GUIDANCE		
5.1 Human resource management and competencies	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
5.1.1 The establishment shall: a) identify and have access to enough personnel to enable the fulfilment of the requirements of the Standard; b) demonstrate that personnel involved in activities relating to the handling, stunning, slaughter and animal welfare monitoring have the competencies contained in Annex B; and c) allocate and communicate to personnel their responsibilities.	Types of evidence can include: • Human resource calculations and planning. • Organisational charts showing allocations of responsibility. • Personnel contracts, letters of appointment, position descriptions, duty statements that explain their responsibilities and the competencies expected. • Personnel induction and training plans and records. • List or registers of personnel, their positions and sign-off of their competence, e.g. skills matrix. • Demonstration of personnel undertaking their responsibilities in a competent and effective manner.	The required outcome is for the establishment to demonstrate: • that it has identified and secured the human resources it needs to undertake processing activities in accordance with the Standard; • that those resources are competent; and • that they have been told what their responsibilities are. The assessment of competency should focus on: • understanding the job-tasks being undertaken by personnel; • identifying the type of knowledge required to complete the job-task effectively; and • describing and performing the skills that would demonstrate evidence of the required knowledge being applied correctly and efficiently. In short, knowledge x skill = competence. The establishment should have some way of assessing and recording its authorisation that a person is competent to do the job-task that they have been allocated. Annex B is a normative requirement, meaning that all the job roles listed in the table must have the competencies indicated.	<i>Ref [1] Definition of competence</i> <i>Ref [2] Approved Arrangement guidance - Part 1 System Support (Training)</i> <i>Ref [4] Australian Standard AS 4696 - Section 3.5</i> <i>Ref [3] Export Control (Meat and Meat Products) Rules 2021</i> <i>Ref [12] Australian Meat Processing Training Package (AMP) (Release 2.2) (Skills Impact – developed by MINTRAC)</i>

REQUIREMENT	GUIDANCE		
5.1 Human resource management and competencies	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
5.1.2 The establishment shall identify and allocate responsibilities for fulfilling animal welfare requirements, including specific personnel at each site with responsibility for: a) animal welfare, including stunning, sticking, emergency slaughter and humane killing; b) the day-to-day application of the Standard; and c) animal welfare monitoring activities, including the effectiveness of handling, stunning, sticking, emergency slaughter and humane killing.	Types of evidence can include: • Organisational charts showing allocations of responsibility. • Identification details of personnel. • Personnel contracts, letters of appointment, position descriptions, duty statements that explain their responsibilities and the competencies expected. • Personnel induction and training plans and records. • Demonstration of personnel undertaking their responsibilities in a competent and effective manner.	See explanation 5.1.1 The responsibilities can be covered by several personnel, provided that there is a clear indication of who is responsible for each element contained within the list items. List item a) requires that specific personnel responsible for animal welfare must be identified. Consider all areas where animal welfare may be affected, such as unloading, provision of feed and water, handling, stunning, sticking, emergency slaughter and humane killing. There are formal training packages available in this area, e.g. MINTRAC provides an Animal Welfare Officer Skill set, which is aimed at personnel with this type of responsibility. List item c) requires personnel to be able to identify and interpret species-specific normal behaviour, abnormal behaviour, unsafe behaviour (for example, aggression), signs of stress, injuries, illness, effective/ineffective stunning and slaughter.	<i>Ref [12] Australian Meat Processing Training Package (AMP) (Release 2.2) (Skills Impact – developed by MINTRAC)</i>

REQUIREMENT	GUIDANCE		
5.1 Human resource management and competencies	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
5.1.3 The establishment shall provide training for personnel that: a) is appropriate to their assigned responsibilities; and b) includes health, safety and emergency preparedness. NOTE: Emergencies include fire, injury to livestock or personnel, truck breakdowns or accidents, acts of nature, interruption to supply of resources (for example, power failure), equipment breakdowns and environmental conditions (e.g. extreme heat or cold, flooding, high winds).	Types of evidence can include: • Personnel training plans and records. • Lists or registers of personnel, their positions and sign-offs of their competence.	Training can be provided in-house or through external programmes. List items a) and b) require that training is appropriate to an individual's assigned responsibilities and also includes health, safety and emergency preparedness. The types of emergencies that need to be covered are listed in the note. The frequency of refresher training for personnel needs to be determined by the establishment. This may vary between the type of roles and the complexity and impact of the tasks being undertaken. For example, tasks of high risk to welfare (See 5.1.4) should be supported by regular refresher training. What is important is that personnel can demonstrate that they are competent and remain competent.	Ref [4] Australian Standard AS 4696 - Section 3.5 Ref [12] Australian Meat Processing Training Package (AMP) (Release 2.2) (Skills Impact – developed by MINTRAC)

REQUIREMENT	GUIDANCE		
5.1 Human resource management and competencies	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
5.1.4 For personnel undergoing training, the establishment shall: a) provide direct supervision, by a competent person, when the tasks are high risk for welfare; and NOTE: Tasks that are high risk to welfare include animal handling, restraint, stunning, sticking, emergency slaughter and humane killing. b) monitor progress until assessed competent; and c) document training and competencies achieved.	Types of evidence can include: • Documented procedure or method that includes reference to training and supervision of personnel who are not yet competent. • Personnel training plans and records. • Personnel progress reports. • List or registers of personnel, their positions and sign-offs of their competence.	See explanation 5.1.1 regarding competency. The required outcome is for the establishment to demonstrate that personnel who are undergoing training (and have not yet been deemed competent) are directly supervised by a competent person, when the tasks are high risk for animal welfare. Examples of high-risk tasks are provided in the note.	<i>Ref [12] Australian Meat Processing Training Package (AMP) (Release 2.2) (Skills Impact – developed by MINTRAC)</i>

REQUIREMENT	GUIDANCE		
5.2 Physical resources	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
5.2.1 Infrastructure and equipment shall: a) not cause injury, pain, suffering or distress to the animal; b) allow for effective, low-stress handling of livestock; c) allow livestock to be segregated to the extent necessary to avoid injury, pain, suffering or distress; d) allow aggressive livestock to be removed, or managed, to reduce the likelihood of injury and stress to other animals in the group; e) enable control of environmental conditions, to allow effective thermoregulation; NOTE: Environmental conditions can include temperature, humidity, air quality which can be modified and controlled by provision of shade, ventilation or climate control and air conditioning. f) be in good repair and effective working order in accordance with a maintenance schedule.	Types of evidence can include: • Maintenance schedule and records of maintenance being undertaken. • Documented information on safety of electrical installations and automatic equipment. • Maintenance and testing of emergency equipment. • Documented procedure or method that includes reference to checking equipment and maintenance activities. • Photos/videos. • Demonstrations of infrastructure and equipment being used.	The required outcome is for the establishment to demonstrate that it can ensure that infrastructure and equipment work and do not cause harm to livestock. It also makes reference to effective handling of livestock, meaning that the infrastructure and equipment must allow for animals to be handled without causing them injury, fear or stress. Improper use of hoses or washing systems to move or clean animals that results in injury, fear, or harm would not fulfil this requirement. There are many examples of facility design that can aid the effective handling and movement of animals. For example, the use of: • non-slip flooring; • races with solid sides and of an appropriate width for the species; • races that allow animals to walk side by side where appropriate, for example, pigs; • races with smooth turns and curved corners to encourage the natural flow of movement of animals; • fully enclosed races for deer to reduce visually apparent opportunities for escape; and • ramps angles <20 degrees. For example, ramps with a slope of greater than 20 degrees have been shown to contribute to decreased welfare in horses, while slopes greater than 12 degrees have been associated with welfare concerns in bobby calves.	<i>Ref [4] Australian Standard AS 4696</i> <i>Ref [19] MCOP - Slaughtering establishments</i> <i>Ref [13] NAMI Recommended handling guidelines and audit guide</i>

REQUIREMENT	GUIDANCE		
5.2 Physical resources	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
		List item e) requires that the processing plant can modify or control the environmental conditions that livestock are exposed to. This can involve careful planning (for example, transport overnight for slaughter first thing in the morning) and mitigation strategies (for example, reducing pen stocking density), in addition to actually controlling the thermal environment itself. More specific requirements about infrastructure and equipment are included in the rest of the standard. This requirement also applies to stunning and humane killing equipment, which needs to be maintained in a good state of repair and effective working order. Many ineffective stuns are caused by dirty or defective equipment; therefore, it is important that equipment is cleaned and maintained in accordance with manufacturer's recommendations and both tested and calibrated prior to use. List item f) also applies to VSS equipment.	
5.2.2 If defective infrastructure or equipment does not fulfil 5.2.1 a), the establishment shall: a) ensure livestock be removed from the area; or b) ensure the infrastructure and equipment is not used until repaired.	Types of evidence can include: • Documented procedure or method that includes reference to management of defective equipment. • Photos/videos. • Demonstrations of infrastructure and equipment being used. • Demonstration of removal of livestock from defective area/equipment.	The establishment must demonstrate that if infrastructure and equipment are defective, livestock are protected from harm until the problem is fixed. If this cannot be achieved, then the equipment needs to be repaired before it is used.	

REQUIREMENT	GUIDANCE		
5.2 Physical resources	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
5.2.3 The flooring of infrastructure shall allow for effective draining.	Types of evidence can include: • Documented procedure or method that includes reference to the management and maintenance of facilities. • Photos/videos. • Observation of flooring.	The establishment must demonstrate that flooring where animals are held or are being moved allows for effective draining. The build-up of water in races, etc., can act as a distraction during the movement of animals or may cause them to slip and fall. Slipping and falling is a combination of the surface quality and the handling of the animals when on that surface (see also relevant handling requirements - 6.2).	<i>Ref [13] NAMI Recommended handling guidelines and audit guide</i> <i>Ref [4] Australian Standard AS 4696 - Section 19.17</i> <i>Ref [19] MCOP - Slaughtering establishments</i>
5.2.4 Lighting shall be sufficient to aid animal movement and to perform individual animal inspections.	Types of evidence can include: • Documented procedure or method that includes reference to animal handling or movement as affected by lighting. • Documented procedure or method that includes reference to livestock inspection. • Photos/videos. • Demonstrations of livestock inspection procedure. • Demonstration of livestock handling procedures.	The establishment must demonstrate that lighting allows for animals to be inspected. Lighting has to be of an intensity that allows individual animals to be observed and conditions identified. Some compliance requirements may actually specify the intensity required (measured in lux), for example, the export construction guidelines (Ref [21]) specify the use of 110 lux throughout livestock pens and 220 lux in suspect pens. Lighting also needs to allow for the effective movement of animals. Animals generally move more effectively if lighting is uniform or if they are moving from a darker to brighter environment. Welfare of deer in lairage can be improved by reducing light levels.	<i>Ref [13] NAMI Recommended handling guidelines and audit guide</i> <i>Ref [19] MCOP - Slaughtering establishments</i> <i>Ref [21] Export Construction guidelines</i>

REQUIREMENT	GUIDANCE		
5.2 Physical resources	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
5.2.5 Lairage holding pens shall allow for livestock to stand up, lie down, turn around and access drinking water.	Types of evidence can include: • Documented procedure or method that includes reference to animal holding conditions, including space allowance. • Photos/videos. • Demonstrations of infrastructure being used. • Lairage plan that allows for space allowances to be determined. • Recommended stocking density guidance for each pen for relevant classes of animals. • Documented information, for example, records of processing numbers and pen allocation.	The establishment must demonstrate that livestock have sufficient space in the holding facility. Space allowance must be sufficient to enable animals to stand, lie down, and move freely within the pen to access water. All individuals must be provided with the opportunity to lie down. If livestock are stocked in the pen too tightly, it can also make it difficult for handlers to empty the pen. Space allocation may vary depending upon animal size, behaviour, holding time and environmental conditions. These types of factors need to be considered when determining appropriate space allowances in the holding facilities. The minimum recommended space allowance (Ref 19) for sheep, pigs and goats is 0.6m² per head. For cattle, it is 1.9m² per head. For deer, buffalo and horses, it may be necessary to consult the relevant compliance requirements or further information, such as the Model Codes of Practice for buffalo and deer.	<i>Ref [4] Australian Standard AS 4696 - Section 7.4</i> <i>Ref [16] MCOP - Buffalo</i> <i>Ref [18] MCOP - Deer</i> <i>Ref [19] MCOP - Slaughtering establishments</i>
5.2.6 Equipment for providing drinking water shall be available and operational in areas where livestock are held. NOTE: Areas where livestock are held do not include parts of the handling system where livestock are being moved.	Types of evidence can include: • Documented procedure or method that includes provision and maintenance of equipment used to provide water to livestock. • Photos/videos. • Observation of equipment.	The establishment must demonstrate that facilities used to hold livestock are fitted with equipment for providing water. It is not a requirement for watering equipment to be fitted in areas where animals are being moved, for example, races and crowd pens; however, these parts of the system therefore cannot be used to hold animals.	

REQUIREMENT	GUIDANCE		
5.2 Physical resources	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
5.2.7 If livestock are to be fed in the lairage, equipment for providing feed shall be available and operational in areas where livestock are held.	Types of evidence can include: • Documented procedure or method that includes provision and maintenance of equipment used to provide feed to livestock. • Photos/videos. • Observation of equipment.	The establishment must demonstrate that when animals are being fed, feeding equipment is available in facilities used to hold livestock. This equipment can be temporary and does not need to be a permanent fitting in the holding area.	<i>Ref [4] Australian Standard AS 4696</i>
5.2.8 Facilities shall be available to segregate and care for weak, injured or ill livestock, where necessary to prevent further pain, suffering, or distress to the animal.	Types of evidence can include: • Documented procedure or method that includes reference to the facilities that are available for caring for weak, injured or ill livestock. • Photos/videos. • Observation of facilities. • Observations or records of the use of segregation facilities to manage weak, ill or injured livestock.	The establishment must demonstrate that facilities are available to segregate and care for weak, injured or ill livestock if necessary, to prevent further pain and distress to the animal. Segregation must allow animals to maintain visual and audible contact with animals of the same species. See also 6.4 which covers the daily management of weak, injured or ill livestock.	<i>Ref [4] Australian Standard AS 4696</i> <i>Ref [19] MCOP - Slaughtering establishments</i>

REQUIREMENT	GUIDANCE		
5.2 Physical resources	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
5.2.9 Equipment for the emergency slaughter and humane killing of livestock shall be readily available.	Types of evidence can include: • Documented procedure or method that includes reference to the availability and use of stunning/killing equipment. • Photos/videos. • Demonstration of how equipment can be retrieved when required. • Observation of equipment and storage facilities.	The establishment must demonstrate that equipment for the emergency slaughter and humane killing of livestock is available when needed. This means that there may be a need for equipment to be held in the livestock holding facility, such that there is no delay in retrieving equipment. See also 5.2.1, which covers the requirement for equipment to be maintained in effective working order.	<i>Ref [4] Australian Standard AS 4696</i> <i>Ref [19] MCOP - Slaughtering establishments</i>
5.2.10 A functional video surveillance system shall be installed and operational to clearly monitor the following processes: a) unloading livestock from vehicles into the lairage; b) movement of livestock from the lairage to the stunning area; c) restraint and stunning; d) shackling and hoisting; and e) sticking. NOTE When Controlled Atmosphere Stunning (CAS) systems are used, list item (c) means monitoring entry into and exit from the CAS system.	Types of evidence can include: • Documented procedure or method covering the installation and use of video surveillance equipment. • Photos/videos. • Demonstration of use of equipment. • Demonstration and records of observation of footage.	The use of a VSS represents good practice and provides assurance that the parts of the process that represent a high risk to animal welfare are under surveillance. Where VSS is used, the establishment needs to demonstrate that the cameras are installed in the areas in item list a)-e). The cameras need to be in good working order to provide continuous coverage when animals are in the area. It is important that the image is clear to enable effective monitoring. When Controlled Atmosphere Stunning (CAS) systems are used for pigs, list item (c) means monitoring entry into and exit from the CAS system. The AMIC Animal Welfare Video Surveillance System Operational Manual describes how a processing establishment Video Surveillance System (VSS) can be integrated into the Animal Welfare Management System to support the monitoring and verification of animal welfare outcomes.	<i>Ref [20] AMIC Animal Welfare Video Surveillance System Operational Manual</i>

REQUIREMENT	GUIDANCE		
5.2 Physical resources	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
5.2.11 The recorded video surveillance footage shall be retained by the establishment for a period of at least one month.	Types of evidence can include: • Documented procedure or method covering the retention of video surveillance footage. • Observation of stored footage.	Any surveillance footage needs to be retained (and accessible) for a minimum period of 1 month (>30 days). Establishments should be aware of any compliance requirements which may require longer retention periods.	<i>Ref [20] AMIC Animal Welfare Video Surveillance System Operational Manual</i>

6 Management and care of livestock

REQUIREMENT	GUIDANCE		
6.1 Reveal of livestock at the establishment	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
6.1.1 The establishment shall: a) schedule reveal to ensure unloading of livestock occurs without delay; b) take immediate action to ensure that any delay in unloading does not compromise animal welfare; and c) take into account the welfare needs of livestock when scheduling slaughter. NOTE An example of fulfilling 6.1.1 c), which involves taking the welfare needs of livestock into account when scheduling slaughter, could be prioritising the slaughter of bobby calves.	Types of evidence can include: • Documented procedure or method that describes scheduling of livestock and covers list items a) to c). • Documented information to show how the welfare needs of livestock are taken into account when slaughter is being scheduled, for example, list of priority livestock. • Photos/videos. • Demonstration of the process.	The required outcome is for the establishment to demonstrate that livestock are unloaded without delay when they arrive at the processing plant. Holding livestock on stationary vehicles is a welfare risk and therefore prompt unloading aims to mitigate against that risk. If a delay does occur and livestock cannot be unloaded immediately, the establishment needs to take immediate action to monitor and take action to avoid any adverse animal welfare outcomes. When scheduling livestock for slaughter it is important that the welfare needs of all livestock are taken into account. Examples include: heavily pregnant animals that should not have been transported, bobby calves, lactating cows, animals that give birth in the processing plant. In the event that heavily pregnant animals, that should not have been transported, give birth in the establishment, the offspring need to be effectively managed. During scheduling for slaughter, total transport times and time off feed and water should be considered. A maximum of one hour holding time is recommended for horses.	<i>Ref [19] MCOP - Slaughtering establishments</i> <i>Ref [17] Land Transport Standards and Guidelines</i>

REQUIREMENT	GUIDANCE		
6.1 Receival of livestock at the establishment	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
6.1.2 The establishment shall advise livestock suppliers of: a) any livestock that were not fit for the intended journey (Annex C); and b) any adverse animal welfare outcomes upon arrival at the processing establishment. NOTE: Producers, feedlots, transporters and saleyards are examples of livestock suppliers.	Types of evidence can include: • Documented procedure or method for informing livestock suppliers of item lists a-b. • Records of livestock condition. • Demonstration of the process. • Evidence of communication with livestock suppliers (for example, emails, phone log, written notification).	The required outcome is for the establishment to demonstrate that there is a process for advising livestock suppliers when situations occur as described in list items a)-b). There may also be compliance requirements that require the relevant controlling authority to be notified of any animals that were not fit for the intended journey and any adverse animal welfare outcomes. Ensuring that expectations regarding the fitness of livestock for the intended journey are communicated to livestock suppliers can minimise the risk of receiving weak, ill or injured livestock at the establishment.	<i>Ref [17] Land Transport Standards and Guidelines</i>

REQUIREMENT	GUIDANCE		
6.2 Livestock handling	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
6.2.1 Livestock handling shall be undertaken in a manner that: a) uses low-stress livestock handling techniques taking into account the animal's natural behaviour; b) does not subject livestock to noise that creates stress or panic; c) does not require livestock to be isolated unless absolutely necessary; d) ensures any use of handling aids is appropriate; and NOTE: Handling aids may include flags, rattles, paddles, electric goads. e) ensures any use of working animals is appropriate; and f) does not subject livestock to unacceptable practices and procedures (Annex D).	Types of evidence can include: • Documented procedure or method for livestock handling, that covers the method and equipment used. • Demonstration of procedures. • Monitoring records of performance indicators (for example, vocalisation, slips and falls - see 6.2.2).	The required outcome is for the establishment to demonstrate that livestock are not stressed or panicked during handling procedures. List item a) refers to the use of low-stress livestock handling techniques that take into account the animal's natural behaviour. One aspect of natural behaviour that is particularly useful when handling livestock is the use of the 'flight zone'. The flight zone is the animal's personal space. The movement of the stockperson into the flight zone will usually provoke movement in the animal. The control of this movement is a basic principle of animal handling. There are more detailed explanations of low-stress stock handling techniques in Ref [13] and Ref [15]. List item f) refers to Annex D, which is a list of unacceptable practices and procedures. Within Annex D there is reference to 'hitting' animals, which implies the use of excessive force. The use of 'excessive force' in this instance would be, for example, when the stockperson's elbow is raised above their shoulder height when making contact with the animal or using a handling tool on the animal. Improper use of hoses to move animals that results in injury, fear, or harm would not fulfil this requirement. Vibrating prods are a relatively recent approach to moving livestock. They have been used successfully for moving pigs.	Ref [4] Australian Standard AS 4696 Ref [13] NAMI Recommended handling guidelines and audit guide Ref [15] WOAHA Terrestrial Animal Health Code Ref [19] MCOP - Slaughtering establishments

REQUIREMENT	GUIDANCE		
6.2 Livestock handling	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
6.2.2 During active handling at unloading and from lairage to entry into restraint, the establishment shall monitor the following targets in accordance with Annex A: a) no more than 1% of animals fall; b) no more than 3% of cattle vocalise when under direct and active handling in races, crowd pens and moving into restraint; c) no more than 5% of cattle vocalise when head restraint is used; and d) no more than 5% of pigs vocalise when being moved into the restrainer. NOTE: A restrainer for pigs may include a gondola, restrainer for automatic electrical stunning, or stun box.	Types of evidence can include: • Documented procedure or method for the monitoring of animal handling during unloading and up to the point of restraint (as per Annex A). • Demonstration of the monitoring process. • Monitoring records for list items a) - d), with corrective actions where targets are not fulfilled.	The required outcome is for the establishment to demonstrate that it has processes in place to monitor animal handling during unloading and up to the entry into restraint. Appendix 01 describes animal welfare monitoring procedures and associated performance indicators. It should be noted that these are mandatory limits (See Annex A of the Standard) and the establishment should work towards demonstrating continuous animal welfare improvement by analysing their performance and introducing more stringent targets. Monitoring slips are a secondary performance indicator that can also be used.	<i>Ref [13] NAMI Recommended handling guidelines and audit guide</i> <i>Ref [Appendix 01 of this guidance document]</i>

REQUIREMENT	GUIDANCE		
6.2 Livestock handling	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
6.2.3 Where electric goads are used to move livestock, they shall: a) be used in accordance with compliance requirements; b) not be used on livestock less than 3 months old; c) be only applied to the hindquarters of the animal; d) not be applied to genital, anal, facial areas or udders; e) not be used on livestock that are unable to move away; f) be used on less than 25% of cattle and buffalo; g) be used on less than 5% of rams and goats, and only at the entrance to the restrainer; h) be used on less than 5% and 25% of pigs in group and single file systems, respectively; i) not be used on horses, deer or sheep (other than rams); j) not be used on livestock known or visually assessed to be pregnant; and k) not be used in an unacceptable manner (Annex D) on any animal.	Types of evidence can include: • Documented procedure or method for the use of electric goads. • Description and demonstration of equipment. • Demonstration of procedures. • Photos/video of procedures. • Monitoring records indicative of appropriate use of the electric goad, with corrective actions where targets are not fulfilled.	The required outcome is for the establishment to demonstrate that when electric goads are used to move livestock, the conditions described in list items a) to k) are fulfilled. List item a) refers to compliance requirements. Compliance requirements are defined as: <i>Any local, regional, national and international:</i> <i>a) statutory or regulatory requirements (including any necessary certificates, permits, licences, permissions, consents);</i> <i>b) requirements in treaties or conventions; and</i> <i>c) contractual requirements.</i> They may therefore include any additional customer or contractual requirements that prohibit the use of electric goads. There may also be jurisdictional differences regarding the use of electric goads. For example, they cannot be used to move goats in NSW. It is important that the establishment understands and applies the compliance requirements that are relevant to them. The definition of an electric goad is 'A low voltage (<50 volts) or commercially manufactured electric device designed and used for the purpose of making livestock move.' This means that any electric goads manufactured 'in-house' (i.e. not commercially manufactured) not only need to meet compliance requirements, but there also needs to be evidence that the equipment is low voltage (<50 volts) and that it has been specifically designed and is fit for purpose.	<i>Ref [13] NAMI Recommended handling guidelines and audit guide</i> <i>Ref [15] WOAHA Terrestrial Animal Health Code</i> <i>Ref [16] MCOP Buffalo</i> <i>Ref [Appendix 01 in this guidance document]</i> <i>Ref [22] EFSA Panel on Animal Health and Welfare (2020)</i>

REQUIREMENT	GUIDANCE
	This requirement also provides limits for electric goad use. It should be noted that these are mandatory limits, and the establishment should still work towards demonstrating continuous animal welfare improvement by analysing their performance and introducing more stringent targets. An electric goad should not be a handler's primary tool and should be replaced as much as possible with alternative handling tools such as flags, plastic paddles, etc. The EFSA Panel on Animal Health and Welfare (Ref [22]) recommend that the use of electric goads should be avoided. Establishments trying to work towards best practice in animal welfare should be striving to calmly and effectively move animals through the system, without the need for the use of electric goads or dogs. List item k) refers to Annex D, which covers unacceptable practices and procedures. Using an electric goad multiple times on an animal, particularly when animals fail to respond or move, or holding the electric goad on the animal is unacceptable. The requirement prohibits the use of electric goads on sheep (other than rams) because they are generally ineffective. Wool acts as an insulator, preventing the delivery of the shock. The lack of behavioural response may encourage handlers to apply the goad in sensitive areas, which is unacceptable. Electric goads are only effective for moving buffalo in single-file races (Ref [16]) and not in parts of the handling system where the buffalo has the ability to turn around.

REQUIREMENT	GUIDANCE		
6.2 Livestock handling	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
6.2.4 Where dogs are used to move livestock, they shall: a) be used in accordance with compliance requirements; b) be trained, muzzled and supervised; c) not be used during the handling of horses, pigs or deer; d) not be used during the handling of livestock less than 3 months old; e) not be used on livestock that are unable to move away; and f) when not being used, kept away from areas where livestock are held.	Types of evidence can include: • Documented procedure or method outlining the use of dogs to move livestock, including consideration of list items a) to f). • Demonstration of procedures. • Photos/video of procedure. • Monitoring records of performance indicators when dogs are in use (for example, falls – see 6.2.2).	The required outcome is for the establishment to demonstrate that any use of dogs is effectively managed. The requirements prohibit the use of dogs during the handling of horses, pigs and deer. The use of dogs does not preclude fulfilment of requirement 6.2.1 which requires low stress livestock handling techniques that take into account the animal's natural behaviour and does not subject livestock to noise that creates stress or panic. List item a) requires that if dogs are used, this is in accordance with compliance requirements. This may include any additional customer or contractual requirements that prohibit the use of dogs. List item b) requires dogs to be trained, muzzled and supervised. The intent of this requirement is that the dog is muzzled, under control, responds to commands from the handler and is supervised directly whilst being worked. List item e) prevents the use of dogs when livestock cannot move away to avoid the pressure. This needs to be particularly considered when animals are being moved into crowd pens and races. The number of dogs used on an individual mob will also impact on the pressure experienced by the livestock and therefore needs to be considered by the establishment. List item f) requires that when not working, dogs are kept away from the vicinity of livestock in holding facilities. In addition, the establishment should provide dogs with shelter and access to water.	<i>Ref [4] Australian Standard AS 4696</i>

REQUIREMENT	GUIDANCE		
6.2 Livestock handling	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
		Establishments trying to work towards best practice in animal welfare should be striving to calmly and effectively move animals through the system, without the need for the use of electric goads or dogs.	
6.3 Daily management of livestock			
6.3.1 Livestock shall be protected from exposure to adverse weather conditions.	Types of evidence can include: • Documented procedure or method for holding livestock. • Demonstration of facilities and process. • Photos/video of facilities and process.	This requirement is relevant to any holding of livestock. The required outcome is for the establishment to demonstrate that livestock are protected from adverse weather conditions. For example, providing shade in lairage areas, when animals are at risk of heat stress.	<i>Ref [4] Australian Standard AS 4696</i> <i>Ref [19] MCOP - Slaughtering establishments</i>
6.3.2 Clean, palatable water shall be available and accessible to livestock at all times while they are held. NOTE: Clean, palatable water means that it is suitable for livestock to drink. It does not mean potable.	Types of evidence can include: • Documented procedure or methods that includes reference to the provision of clean, palatable water to livestock, for example, details of water source, trough cleaning etc. • Demonstration of facilities and process. • Photos/video of facilities and process. • Observation of condition of water and watering equipment.	The required outcome of this requirement is for the establishment to demonstrate that when animals are held prior to slaughter they have access to clean, palatable water. Palatable does not mean 'potable' (that being safe for humans to drink), but instead suitable for livestock consumption. The term 'clean' means that it needs to be free from visible physical contamination that would render it non-palatable. Working livestock, for example, dogs and lead animals also need to have access to water.	

REQUIREMENT	GUIDANCE		
6.3 Daily management of livestock	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
6.3.3 All livestock held over 24 hours shall have access to suitable feed that is palatable and free from physical contamination.	Types of evidence can include: • Documented procedure or method for feeding livestock during the holding period. • Demonstration of process. • Photos/video of process. • Documented information, for example feeding records, livestock/pen identification or pen cards. • Observation of feed, feeding equipment and feed storage area. • Observation of animals feeding and demonstrating readiness to eat.	The required outcome of this requirement is for the establishment to demonstrate that any animals that are held on-site for over 24 hours are given access to feed. The feed needs to be palatable (suitable for and accepted by livestock). Physical contamination can include things like large amounts of feed dust, dirty or fouled feeding equipment, stale feed, debris such as string, packaging material, and litter. The establishment may also wish to give additional consideration to those animals who have already been off feed for >24 hours due to transport.	<i>Ref [4] Australian Standard AS 4696</i> <i>Ref [19] MCOP - Slaughtering establishments</i>

REQUIREMENT	GUIDANCE		
6.3 Daily management of livestock	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
6.3.4 Livestock in the lairage shall be inspected upon arrival and at least every 24 hours thereafter, with action taken if any adverse animal welfare outcomes are observed.	Types of evidence can include: • Documented procedure or method for the inspection of livestock during the holding period. • Demonstration of process. • Photos/video of process. • Records of inspection, with details of action taken if any adverse animal welfare outcomes are observed.	The required outcome of this requirement is for the establishment to demonstrate that there is a process of animal inspection at arrival. The process needs to take into account the possibility of livestock arriving out of hours. Any personnel inspecting animals should be able to identify abnormal behaviour, appearance and signs of ill-health, disease and injury in animals, and have the authority to take the appropriate action if welfare is actually or potentially compromised. Therefore, if unloading is undertaken out of hours, inspection is the responsibility of the truck driver (SA5.14 - Ref [17]), and they too need to be competent. In this scenario, the expectations of the establishment need to be effectively communicated, for example, by signage in the unloading area or the provision of contact numbers directed to employees on-call. Adverse animal welfare outcomes can also include aggressive behaviour between animals, that could lead to stress and injury. Action taken needs to manage this type of behaviour, for example, by segregating the aggressors.	<i>Ref [4] Australian Standard AS 4696</i> <i>Ref [17] Land Transport Standards and Guidelines</i> <i>Ref [19] MCOP - Slaughtering establishments</i>

REQUIREMENT	GUIDANCE		
6.4 Identification and management of weak, ill or injured livestock	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
Livestock that are identified as weak, ill or injured shall be: a) segregated and cared for, where necessary to prevent further pain, suffering or distress to the animal; NOTE: Segregation involves maintaining audible and visual contact with livestock of the same species. b) only moved if movement will not cause any further pain, suffering or distress; and c) subject to emergency slaughter or humane killing without delay if deemed to be suffering.	Types of evidence can include: • Documented procedure or method that includes reference to management of weak, ill or injured livestock. • Documented procedure or method that includes reference to emergency slaughter. • Demonstration of procedures. • Observation of segregation facilities. • Records of casualty slaughter.	See also 5.2.8, which covers the provision of facilities for the segregation of weak, injured or ill livestock. The required outcome is for the establishment to demonstrate that any weak, ill or injured livestock are segregated and cared for. If moving the animal is likely to cause further pain, injury, suffering or distress then emergency slaughter or humane killing needs to be carried out without delay. The establishment may also need to consider how it will provide appropriate care for any weak, ill or injured livestock out of hours (including any animals arriving at the establishment - see also 6.3.4). There may also be compliance requirements that require the relevant controlling authority to be notified of any animals that are diseased or ill, or any adverse animal welfare outcomes. For example, there is a requirement to advise the state authority without delay if the occupier is aware of an animal affected by a notifiable disease being presented or suspects an animal of being affected.	<i>Ref [4] Australian Standard AS 4696</i> <i>Ref [13] NAMI Recommended handling guidelines and audit guide</i> <i>Ref [19] MCOP - Slaughtering establishments</i>

7 Humane stunning and sticking processes

REQUIREMENT	GUIDANCE		
7.1 Restraint	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
7.1.1 Livestock shall be restrained for stunning using a method that: a) is designed and operated effectively for the species and type of livestock processed; b) allows the animal to be positioned for effective stunning; and c) does not involve the use of unacceptable practices and procedures, included in Annex D.	Types of evidence can include: • Documented procedure or method that includes reference to the appropriate design and operation of restraint. • Manufacturer's information. • Demonstration of the procedure. • Review of monitoring records for key performance indicators that demonstrate the effectiveness of the restraint method, for example, animal behaviour during restraint, time spent in restraint, incidence of slips or falls, appropriateness of handling techniques, and indicators of effective stunning.	The required outcome is for the establishment to demonstrate that an effective method for restraining livestock prior to stunning that satisfies list items a)-c) is used. Restraint methods involve the use of equipment that controls the movement of livestock and facilitates effective stunning. List item a) - It is important that the restraint method used is appropriate for the species and type of livestock being processed, for example, head restraint is not an acceptable method for restraining horses. In some establishments, the same restraint equipment may be used for more than one species. In this case, the equipment needs to be appropriate for each type of livestock being processed. List item b) - It is important that restraint methods keep conscious animals in an upright position (for example, boxes that rotate conscious animals would not fulfil this requirement) and ensure that they do not fall, lose balance or escape. List item c) refers to Annex D which is a list of prohibited unacceptable practices and procedures. Ref [15] also contains a list of practices that should be avoided during the restraint of animals.	<i>Ref [4] Australian Standard AS4696 - Section 7.11</i> <i>Ref [19] MCOP - Slaughtering establishments</i> <i>Ref [13] NAMI Recommended handling guidelines and audit guide</i> <i>Ref [15] WOAHA Terrestrial Animal Health Code</i>

REQUIREMENT	GUIDANCE		
7.1 Restraint	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
7.1.2 The establishment shall ensure that: a) livestock are not left in restraint, single file races or without access to water during scheduled breaks in processing; and b) during delays, the welfare of livestock is monitored and action is taken if welfare is compromised. NOTE: Appropriate action may involve removing livestock from the handling system and returning them to holding pens.	Types of evidence can include: • Documented procedure or method that includes reference to the management of livestock during delays or breaks during processing. • Demonstration of the procedure. • Monitoring records, with corrective action taken if welfare is compromised.	The required outcome is for the establishment to demonstrate that livestock are managed effectively in the event of scheduled breaks and delays during processing.	<i>Ref [13] NAMI Recommended handling guidelines and audit guide</i> <i>Ref [19] MCOP - Slaughtering establishments</i>
7.1.3 When livestock are being moved into restraint for stunning, the establishment shall monitor vocalisation and use of electric goads in accordance with 6.2.2 and 6.2.3, as applicable.	Types of evidence can include: • Documented procedure or method that covers the movement of livestock into restraint and includes reference to monitoring of vocalisation and use of electric goads. • Demonstration of monitoring procedure. • Monitoring records, with corrective actions where targets are not fulfilled.	The required outcome of this requirement is for the establishment to demonstrate that it monitors vocalisation and the use of the electric goad during the movement of cattle and pigs into restraint. The details of the required monitoring process are covered by 6.2.2 and 6.2.3. Appendix 01 describes animal welfare monitoring procedures and associated performance indicators.	<i>Ref [13] NAMI Recommended handling guidelines and audit guide</i> <i>Ref [Appendix 01 of this guidance document]</i>

REQUIREMENT	GUIDANCE		
7.1 Restraint	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
7.1.4 After effective restraint, the animal shall be stunned without delay.	Types of evidence can include: • Documented procedure or method that includes reference to restraint and stunning. • Demonstration of the procedure.	The required outcome of this requirement is for the establishment to demonstrate that animals are stunned ‘without delay’ – this means that stunning needs to be performed as soon as the animal is effectively restrained. Restraint is a stressful event for livestock, therefore the stunning operative needs to be ready to stun the animal as soon as it is effectively restrained.	<i>Ref [4] Australian Standard AS4696 Section 7.9 and 7.10</i> <i>Ref [13] NAMI Recommended handling guidelines and audit guide</i> <i>Ref [15] WOAHA Terrestrial Animal Health Code</i> <i>Ref [19] MCOP - Slaughtering establishments</i>
7.2 Stunning procedures			
7.2.1 Livestock shall be effectively stunned prior to sticking using a method that is in accordance with compliance requirements.	Types of evidence can include: • Documented procedure or method that includes reference to the stunning process. • Demonstration of stunning equipment and process. • Observation of equipment. • Manufacturer’s instructions and recommendations.	The establishment must demonstrate that livestock are stunned before sticking using a method that meets all applicable compliance requirements. The selected stunning method must also enable the establishment to meet other obligations under the Standard, including the effectiveness targets specified in Section 7.2. The establishment needs to consider factors such as the effect of animal type on stunning efficacy. A good example of this is the use of non-penetrating percussive stunning for bulls. Due to the thicker skull of bulls compared to other cattle, non-penetrating stunning may only be suitable for smaller calves and cows. Appendix 02 of this guidance document - Stunning parameters - can be used to develop your procedures around effective stunning methodology, providing evidence	<i>Ref [Appendix 02 of this guidance document]</i> <i>Ref AMPC Stunning guidance</i>

REQUIREMENT	GUIDANCE		
7.2 Stunning procedures	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
		for this requirement (7.2.1). It provides guidance on additional stunning conditions that can be implemented to demonstrate that the requirement has been fulfilled.	
7.2.2 The establishment shall ensure that monitoring of stunning effectiveness is performed in accordance with a documented procedure (Annex A).	Types of evidence can include: • Documented procedure or method that includes reference to the stunning process. • Demonstration of stunning and stun monitoring procedures. • Review of monitoring records that demonstrate the effectiveness of stunning, with documented corrective actions implemented where performance targets are not met.	The required outcome of this requirement is for the establishment to demonstrate that it has processes for monitoring the effectiveness of the stunning process. The minimum mandatory targets are as follows: • When penetrating captive bolt and non-penetrating percussive devices are used, at least 96% of animals are stunned effectively with the first application of the stunning method. • When electrical stunning is used, at least 99% of animals have the electrodes applied in the optimum position and 98% or more of the animals show no sign of starting the process of return of consciousness. • When controlled atmosphere (CO₂) stunning is used, 98% or more of animals show no signs of starting the process of return of consciousness. Appendix 01 describes animal welfare monitoring procedures and associated performance indicators. Appendix 02 describes stunning parameters. Appendix 03 describes the signs of effective stunning.	<i>Ref [13] NAMI Recommended handling guidelines and audit guide</i> <i>Ref [Appendix 01 of this guidance document]</i> <i>Ref [Appendix 02 of this guidance document]</i> <i>Ref [Appendix 03 of this guidance document]</i>

REQUIREMENT	GUIDANCE		
7.2 Stunning procedures	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
7.2.3 Where the first application is not effective or the animal shows signs of recovery before death, the animal shall be re-stunned immediately, using a back-up procedure.	Types of evidence can include: • Documented procedure or method that includes reference to the stunning process and under what circumstances a back-up method needs to be used. • Demonstration of the procedure. • Records of back-up action (for example, record of animals shot a second time).	The use of a back-up method is to ensure that in the event of failure of the primary stunning/slaughter method (where signs of consciousness persist or return), animal welfare is protected. Evidence of fulfilling this requirement would include demonstration that a back-up method is immediately available (that is in accordance with compliance requirements) and it is administered when required. This can also be supported by documented information. The back-up method needs to be effective and appropriate for the primary stunning method, for example, if a bovine has been shot once with a non-penetrating percussive device (and the stun was ineffective), then it is not good practice to administer a second shot using a non-penetrating device and an alternative back-up method may need to be used (e.g. a penetrating captive bolt or free bullet). It may also be acceptable for the re-stun to be administered with the primary stunning equipment, if the cause of the ineffective stun was not related to equipment malfunction.	<i>Ref [13] NAMI Recommended handling guidelines and audit guide</i>

REQUIREMENT	GUIDANCE		
7.2 Stunning procedures	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
7.2.4 The establishment shall ensure that: a) effective stunning is confirmed before sticking or hoisting commences; b) livestock remain unconscious after stunning and until death occurs; and c) bleed rail insensibility is monitored in accordance with a documented procedure (Annex A), where 100% of animals remain unconscious on the bleed rail until death.	Types of evidence can include: • Documented procedure or method that includes reference to the stunning and slaughter process. • Documented procedure or method that includes reference to the monitoring of insensibility on the bleed rail. • Describe or demonstrate action relating to the stunning and slaughter process. • Review of monitoring records that demonstrate the effectiveness of stunning and slaughter, with documented corrective actions implemented where performance targets are not met.	The critical part of this requirement is that the chosen process must result in unconsciousness that lasts until the animal is dead. Accordingly, sticking must be performed promptly after stunning, to allow sufficient and rapid blood loss and to prevent any possibility of the animal regaining consciousness prior to death. The term insensibility is synonymous with ‘unconsciousness’. It is important that any animals showing signs of recovering consciousness (even if still unconscious) are humanely killed using a back-up method. Appendix 01 describes animal welfare monitoring procedures and associated performance indicators.	<i>Ref [4] Australian Standard AS4696 Section 7.9 and 7.10</i> <i>Ref [13] NAMI Recommended handling guidelines and audit guide</i> <i>Ref [19] MCOP - Slaughtering establishments</i> <i>Ref [Appendix 01 of this guidance document]</i>
7.3 Sticking procedures			
7.3.1 Sticking shall be performed using: a) throat cut severing both carotid arteries; or b) thoracic sticking severing the major blood vessels close to the heart.	Types of evidence can include: • Documented procedure or method that includes reference to the sticking procedure used. • Demonstration of procedure.	The required outcome is for the establishment to demonstrate that sticking methods sever the major blood vessels resulting in optimal blood loss (and rapid brain death), whilst the animal is unconscious.	<i>Ref [19] MCOP - Slaughtering establishments</i> <i>Ref [23] Export Meat Operational Reference 1.1a Animal welfare explanatory notes on stunning and sticking at red meat and pork abattoirs</i>

REQUIREMENT	GUIDANCE		
7.3 Sticking procedures	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
7.3.2 In cattle and buffalo (including calves), where an initial throat cut is used, a thoracic stick shall be performed after cutting the throat in accordance with compliance requirements.	Types of evidence can include: • Documented procedure or method that includes reference to the use of thoracic sticking and demonstrates that compliance requirements are being followed. • Demonstration of procedure.	The required outcome is for the establishment to demonstrate that it understands and applies any compliance requirements for the slaughter of cattle and buffalo (including calves) relating to the use of a thoracic stick after throat cutting. It is important that thoracic sticking is used in bovines, due to their vascular anatomy. A neck stick in bovines can lead to a prolonged time to brain death due to continued blood flow to the brain.	<i>Ref [4] Australian Standard AS 4696 - Subclause 7.10</i> <i>Ref [14] Meat Notice: Mandatory thoracic sticking of calves</i> <i>Ref [19] MCOP - Slaughtering establishments</i> <i>Ref [23] Export Meat Operational Reference 1.1a Animal welfare explanatory notes on stunning and sticking at red meat and pork abattoirs</i>
7.3.3 Dressing procedures shall not be performed before the animal is confirmed as dead. NOTE: Dressing procedures do not include oesophageal occlusion and PIC/Rfid removal or scanning, which may be performed when the animal has been confirmed as unconscious.	Types of evidence can include: • Documented procedure or method that includes reference to confirmation of death prior to the initiation of any dressing procedures. • Demonstration of procedure. • Demonstration of checks for signs of consciousness on the bleed rail. • Documented information related to checks performed.	The required outcome is for the establishment to demonstrate that brain death is confirmed prior to any further dressing procedures (e.g. cuts to the carcass, evisceration processes, etc) are performed. The note explains that dressing procedures do not include esophageal occlusion, which may be performed once the animal has been confirmed as effectively stunned (unconscious). See Appendix 03 - Assessment of effective stunning and killing.	<i>Ref [3] Export Control (Meat and Meat Products) Rules 2021</i> <i>Ref [19] MCOP - Slaughtering establishments</i> <i>Ref [Appendix 03 in this guidance document]</i>

REQUIREMENT	GUIDANCE		
7.3 Sticking procedures	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
7.3.4 In cattle, where foetal blood is collected, the establishment shall ensure that: a) this is performed in accordance with a documented procedure (Annex A); b) the welfare of the foetus is safeguarded by ensuring that it remains unconscious throughout the procedure until confirmed dead; and c) if there is any doubt about the consciousness of the foetus, it is killed immediately using a method that is in accordance with compliance requirements.	Types of evidence can include: • Documented procedure or method that includes reference to how the unconsciousness in the foetus is ensured, and the methods used to kill it should it regain consciousness. • Describe and provide evidence, or demonstrate action relating to the process. • Demonstration of procedure. • Monitoring records, with corrective action when there is a deviation from the required outcome.	The required outcome is for the establishment to demonstrate that the welfare of the foetus is protected during foetal blood collection. This involves ensuring that the foetus remains unconscious during the procedure and taking immediate action to kill the foetus should there be any doubt as to its consciousness. Annex A in the Standard requires that the organisation develops a documented procedure for foetal blood collection. Management of foetuses during slaughter of pregnant animals in relation to the welfare of foetuses, the WOAHA Terrestrial Animal Health Code makes the following recommendations: the foetus should be left undisturbed in utero for at least 30 minutes after the death of the dam. The uterus could be removed as a whole, clamped and kept intact such that there is no possibility for the foetus to breathe [Ref 15]. When uterine, placental or foetal tissues, including foetal blood, are not to be collected as part of the post-sticking procedure of pregnant animals, all foetuses should be left inside the unopened uterus until they are dead. Where there is doubt as to foetal consciousness, the foetus should be euthanised with an appropriate device or method in accordance with compliance requirements. Where bovine foetal blood or serum is being collected, additional guidelines state that blood should not be collected for at least 20 minutes after dam death.	<i>Ref [15] WOAHA Terrestrial Animal Health Code</i> <i>Ref [24] Animal welfare aspects in respect of the slaughter or killing of pregnant livestock animals (cattle, pigs, sheep, goats, horses).</i>

REQUIREMENT	GUIDANCE		
Annexes	Examples of evidence	Explanation	Further knowledge and references (See Bibliography)
Annex A - Documented procedures			
Annex B - Personnel competencies		The components of competency are drawn from the Australian Government Department of Industry, Innovation, Science, Research and Tertiary - AMP, Australian Meat Processing Training Package www.training.gov.au .	
Annex C - Fitness for transport			
Annex D - Unacceptable practices and procedures			

BIBLIOGRAPHY

1. ISO9000:2015, *Quality management systems - Fundamentals and vocabulary*.
2. Approved Arrangement - Meat, V.2.2 January 2019, Export Meat Program.
3. Export Control (Meat and Meat Products) Rules 2021.
4. Australian Standard for the Hygienic Production and Transportation of Meat and Meat Products for Human Consumption AS 4696 (Australian Meat Standard).
5. ISO19011:2018, *Guidelines for auditing management systems*.
6. ISO 9001 Auditing Practices Group Guidance on: Effective use of ISO 19011, 2016 - hyperlinked in table.
7. ISO 9001 Auditing Practices Group Guidance on: Internal audit - hyperlinked in table.
8. ISO 9001 Auditing Practices Group Guidance on: Nonconformity - Documenting - hyperlinked in table.
9. ISO 9001 Auditing Practices Group Guidance on: Nonconformity - review and closing - hyperlinked in table.
10. ISO 9001 Auditing Practices Group Guidance on: Policy, Objectives and Management Review - hyperlinked in table.
11. ISO 9001 Auditing Practices Group Guidance on: Statutory and regulatory requirements.
12. Australian Meat Processing Training Package (AMP) (Release 2.2) (Skills Impact – developed by MINTRAC).
13. NAMI Recommended handling guidelines and audit guide: A systematic approach to animal welfare. January 2021.
14. Meat Notice: Mandatory thoracic sticking of calves, March 2018.
15. WOAHA Terrestrial Animal Health Code, 2021.
16. Model Code of Practice for the Welfare of Animals - buffalo, 2003.
17. Australian Animal Welfare Standards and Guidelines - Land Transport of Livestock, 2012.
18. Model Code of Practice for the Welfare of Animals - The farming of deer, 2002.
19. Model Code of Practice for the Welfare of Animals - Livestock at Slaughtering Establishments, 2001.
20. AMIC Animal Welfare Video Surveillance System Operational Manual, 2026.
21. Construction and equipment guidelines for export meat, 1988, Department of Primary Industries and Energy, Australian Quarantine and Inspection Service.
22. EFSA Panel on Animal Health and Welfare (2020) Welfare of Cattle at Slaughter. EFSA journal 18 (11), 6275.
23. DAFF - Export Meat Operational Reference 1.1a Animal welfare explanatory notes on stunning and sticking at red meat and pork abattoirs.
24. EFSA Animal welfare aspects in respect of the slaughter or killing of pregnant livestock animals (cattle, pigs, sheep, goats, horses), 2017.

APPENDIX 01

Animal welfare monitoring and performance indicators

Annex A of the Standard requires a documented procedure for monitoring animal welfare. This guidance (Appendix 01) can be used to develop your documented procedure.

Within the Standard, there are several requirements that describe the processes that must be monitored and the criteria (and targets) that must be used. These are summarised in Table 01 below.

Table 01: Animal welfare monitoring criteria and targets required by the Standard

Monitoring criteria	Definition	Species	Target	Area of process	Assessment methodology	Sample	Requirement reference
Falls	Standard definition 3.9: Occurs when an animal loses an upright position suddenly in which a part of the body other than the limbs touches the ground. Ref [13].	All	≤1%	- Unloading - Handling	Falls are to be assessed in the unloading area, when all four of the animal's limbs are on the unloading ramp or unloading dock. Falls are also to be assessed during handling, when moving livestock to the stunning point.	Assess 50-100 animals to calculate the percentage of animals that fall.	6.2.2 (a)
Vocalisation	Standard definition 3.24: Moo or bellow in cattle as a consequence of direct active handling in the race or crowd pen or during restraint (eg in the stun box). Squeal in pigs. A squeal is an extended sound produced with an open mouth, indicating excitement, fear, or pain. Squealing that occurs when pigs root under each other or jump on top of each other is counted if provoked by the application of electric goads, yelling, poking, or hitting the pigs. Ref [13].	Cattle	≤3%	Handling	The assessment of vocalisation during the handling of cattle is to be carried out when an individual animal is under active and direct handling. For example, during movement into the stun box.	Assess 50-100 animals to calculate the percentage of animals that vocalise. Do not count individual vocalisations.	6.2.2 (b)
		Cattle	≤5%	Head restraint	The assessment of vocalisation during application of head restraint in cattle is to be carried out from the time that the head restraint is applied.	Assess 50-100 animals to calculate the percentage of animals that vocalise. Do not count individual vocalisations.	6.2.2 (c)
		Pigs	≤5%	Movement into restrainer	The assessment of vocalisation in pigs needs to be performed as they are being moved into the restrainer. Vocalisation scoring is only performed for pigs being moved into a single file conveyor restrainer (for electrical stunning or CO ₂ Systems). Vocalisations are not assessed in group CO ₂ systems as it is too difficult to pinpoint the source.	Assess 50-100 animals to calculate the percentage of animals that vocalise. Do not count individual vocalisations.	6.2.2 (d)

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Monitoring criteria	Definition	Species	Target	Area of process	Assessment methodology	Sample	Requirement reference
		Sheep	N/A	- Unloading - Handling - Movement into the restrainer	Although specific quantitative targets for measuring vocalisation in sheep have not been developed, there is evidence to suggest that vocalisation can provide useful information as part of an overall animal welfare assessment. Vocalisation may indicate stress, discomfort or aversive experiences and therefore can contribute to a broader evaluation of handling and restraint when interpreted alongside other welfare indicators.	N/A	N/A
Use of electric goad	Standard definition 3.7: A low voltage(<50 volts) or commercially manufactured electric device designed and used for the purpose of making livestock move.	Cattle, buffalo	<25%	During handling	Touching an animal with an electric goad is counted, whether a shock is delivered or not. Do not count multiple applications of the goad on a single animal as individual events. NOTE: For sheep other than rams, deer and horses, an electric goad must not be used; therefore the target is 0%	Assess 50-100 animals to calculate the percentage of animals handled with the electric goad.	6.2.3 (f)
		Rams, goats	<5%	During movement into the restrainer			6.2.3 (g)
		Pigs	<5%	During handling in group systems			6.2.3 (h)
		Pigs	<25%	During handling in single-file races			6.2.3 (h)

APPENDIX 01

Monitoring criteria	Definition	Species	Target	Area of process	Assessment methodology	Sample	Requirement reference
Application of electrodes in optimum position		All	≥99%	Electrical stunning	With electrical stunning, the assessor evaluates both electrode placement and effective stunning. For electrodes to be applied in the optimum position, they need to 'span the brain'. The first position should be scored, even if the operator subsequently adjusts the position or reapplies the electrodes.	Assess 50-100 animals to calculate a percentage of animals with optimal electrode position.	7.2.2
Effective stunning	Standard definition 3.18: The procedure for rendering an animal unconscious and insensible to pain.	Cattle, buffalo	≥96%	Penetrating and non-penetrating mechanical stunning methods - first application	Assess animals after the application of the first shot. Some plants routinely shoot heavy animals (e.g. large bulls) twice (security stun). In this situation, the assessor must examine the state of the animal after the first shot (before the second shot is applied) (Ref [13])	Assess 50-100 animals to calculate the percentage of animals stunned effectively with the chosen stunning method.	7.2.2
		All	≥98%	Electrical stunning	Assess animals after removal of the electrodes for signs of returning consciousness (see Appendix 03)		7.2.2
		Pigs	≥98%	Controlled atmosphere (CO₂) stunning	Assess animals at the exit of the CAS system for signs of returning consciousness (See Appendix 03)		7.2.2

APPENDIX 01

Monitoring criteria	Definition	Species	Target	Area of process	Assessment methodology	Sample	Requirement reference
Bleed rail insensibility (Unconsciousness)	Standard definition 3.23: State of unawareness (loss of consciousness) in which there is temporary or permanent disruption to brain function, during which the animal does not feel pain.	All	100%	From confirmation of stun until death	Consciousness and unconsciousness occur in essentially three phases: 1) Definitely unconscious; 2) Transition phase before sensibility (consciousness); 3) Definitely conscious. During the transition phase, it is possible to observe indicators of a return to consciousness, however this does not mean the animal is sensible. If this is observed, then a back-up method needs to be applied immediately. If this type of immediate correction is taken before the animal is fully sensible (conscious) then this does not count towards the bleed rail insensibility score. Only animals that are in phase 3 (definitely conscious) should be counted as a non-conformity with this requirement.	Assess 50-100 animals to calculate a percentage of animals that remain stunned (unconscious) on the bleed rail.	7.2.4 (c)

Low processing numbers - A minimum of 100 animals should be assessed in large plants; however for plants processing less than 100 animals/hr this number can be reduced to 50. For processing plants that slaughter low numbers of animals (usually classed as less than 50 animals/hour) one hour of production can be assessed. For a more accurate assessment in small plants, data collected over a period of time should be averaged. An assessment of averaged data may also need to be used during third-party audits.

APPENDIX 02

Stunning parameters

This guidance (Appendix 02) can be used to develop your procedures around effective stunning methodology, providing evidence for requirement 7.2.1, which requires livestock to be stunned in accordance with compliance requirements. The Standard is focused on the outcome of achieving effective stunning. Table 02 provides guidance on additional stunning conditions that may be implemented to demonstrate that the requirement has been fulfilled. However, the information in this table is guidance only and does not constitute mandatory requirements.

Table 02: Recommended parameters for effective stunning

Examples of stunning methods	Species	Important parameters	Recommended conditions	Recommended stun to stick interval
Non-penetrating percussive device	Cattle and buffalo	Equipment to be applied according to manufacturer's recommendations for appropriate position and power (charge, air-pressure, etc.).	Shot position - Refs [13] [17]	20 seconds (Ref [15] - WOA)
	Sheep and goats	Equipment to be applied according to manufacturer's recommendations for appropriate position and power (charge, air-pressure, etc.).	Shot position - Refs [13] [17]	20 seconds (Ref [15] - WOA)
Penetrating captive bolt	All	Equipment to be applied according to manufacturer's recommendations for appropriate position and power (charge, air-pressure, etc.).	Shot position - Refs [13] [17]	There is no maximum stun to stick interval for penetrating captive bolt (Ref [13] [15] - WOA)
Free bullet	All	Equipment to be applied in the correct position with appropriate gauge used. Suitable as an emergency method as local laws allow.	Shot position - Ref [17]	Killing method - No recommended stun to stick interval

APPENDIX 02

Examples of stunning methods	Species	Important parameters	Recommended conditions	Recommended stun to stick interval
Head-only electrical stunning	Cattle and buffalo	Electrode shall span the brain. Minimum current to produce an immediate stun.	Minimum applied current Cattle: 1.28A (Ref [22]), 1.5A (Ref [15]) Calves: 1.0A (Ref [15]), 1.25A (Ref [22])	10 seconds (Ref [13])
	Sheep and goats	Electrode shall span the brain. Minimum current to produce an immediate stun.	Minimum applied current Sheep and goats: 1.0A (Ref [15]) Lambs: 0.7A (Ref [15]), 0.6A (Ref [19])	10 seconds (Ref [13]) 15 seconds (Ref [19])
	Pigs	Electrode shall span the brain. Minimum current to produce an immediate stun.	Minimum applied current 1.25A (Ref [15])	15 seconds (Ref [13])
Head to body electrical stun/kill	Cattle and buffalo	Electrode shall span the brain and the heart. Minimum current to produce an immediate stun.	Minimum applied current (head electrodes) Cattle: 1.5A (Ref [15] [19]) Calves: 1.0A (Ref [15])	There is no maximum stun to stick interval for stun/kill methods
	Sheep and goats	Electrode shall span the brain and the heart. Minimum current to produce an immediate stun.	Minimum applied current (head electrodes) Sheep and goats: 1.0A (Ref [15]) Lambs: 0.7A (Ref [15])	There is no maximum stun to stick interval for stun/kill methods
	Pigs	Electrode shall span the brain and the heart. Minimum current to produce an immediate stun.	Minimum applied current (head electrodes): 1.25A (Ref [15])	There is no maximum stun to stick interval for stun/kill methods
Carbon dioxide	Pigs	Equipment to be used according to manufacturer's recommendations in relation to dwell time and gas concentration.	Minimum dwell time: >3 minutes CO ₂ concentration - preferably 90% by volume but in any case, no less than 80% by volume (Ref [15]) Loading of gondolas (Ref [13])	60 seconds (Ref [15] - WOA)H

APPENDIX 03

Table 03: Assessment of effective stunning and killing

Stunning Methodology	Physical and behavioural signs					
	Physical activity	Breathing	Vocalisation	Response to pain	Head	Eyes
Non-penetrating percussive device	Immediate collapse, uncoordinated kicking may follow	Absent	None	No reaction to a painful stimulus	Hangs straight down, floppy	No spontaneous blinking, eyes open, blank stare, no response to touch. Nystagmus absent.
Penetrating captive bolt	Immediate collapse, uncoordinated kicking may follow	Absent	None	No reaction to a painful stimulus	Hangs straight down, floppy	
Free bullet	Immediate collapse, uncoordinated kicking may follow	Absent	None	No reaction to a painful stimulus	Hangs straight down, floppy	
Head-only electrical stunning	Induction of epileptic seizure where animal collapses, becomes rigid (tonic phase), followed by gradual relaxation and uncoordinated kicking (clonic phase)	Absent, but livestock may show agonal gasping	None	No reaction to a painful stimulus	Hangs straight down, floppy (after tonic phase). The neck/head of sheep may hang at an angle, but should be floppy	Eyes may vibrate (nystagmus). May see downward movement of eyeballs. No spontaneous blinking.
Head to body electrical stun/kill	Animal collapses and becomes rigid (tonic phase), followed by gradual relaxation and no further movement	Absent, but livestock may show agonal gasping	None	No reaction to a painful stimulus	Hangs straight down, floppy (after tonic phase). The neck/head of sheep may hang at an angle, but should be floppy	Eyes may vibrate (nystagmus). May see downward movement of eyeballs. No spontaneous blinking.
Carbon dioxide	Relaxed body at exit, some uncoordinated kicking may be observed	Absent	None	No reaction to a painful stimulus	Hangs straight down, floppy	No spontaneous blinking. Nystagmus absent.

Death of the animal can be confirmed when there is permanent absence of brain stem activity (for example, absence of breathing and eye reflexes).



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