



30 November 2023

## **2023 Update to the Australian Standards for the Export of Livestock (ASEL): *Thematic summary and department response***

The 2023 ASEL update has now concluded. ASEL version 3.3 was published on 30 November 2023.

The update addressed matters raised by stakeholders relating to the export of livestock by both sea and air and proposed amendments to maintain or improve animal health and welfare outcomes, update definitions and improve clarity and usability of the standards.

During the 2023 ASEL update, the department undertook targeted and public consultation with internal and external stakeholders. This included 6 weeks of public consultation from 26 June to 4 August 2023. The department received 33 submissions during public consultation from a range of stakeholders including animal welfare organisations, exporters, industry groups, producers, registered establishment occupiers and members of the public. Where appropriate, the proposed amendments were clarified and modified in response to feedback.

Some feedback contained suggestions that were out-of-scope of the 2023 ASEL update. These suggestions have been recorded and will be considered in future ASEL reviews.

### **Stakeholder feedback and department response**

For each matter considered in the 2023 ASEL update, a summary of de-identified feedback received during consultation is provided in the boxes in this document, followed by the department's response to feedback. The text also outlines any actions taken to clarify or modify the proposed amendments, where appropriate.

The amended standard for ASEL 3.3 is then provided.

# Finalised amendments to the ASEL standards for the 2023 update

## Livestock marking and isolation practices in a Registered Establishment

### Summary of feedback:

Feedback in this matter was varied. Industry was generally supportive of the intent of the amendments, acknowledging the proposed changes aim to balance the welfare risks of individually marking and isolating rejected animals with the risk of inclusion of rejected animals in an export consignment. There was concern, however, that the amendments may still create unnecessary handling events, for example, the requirement to mark rejected animals 'upon identification'. Some feedback suggested marking at one of the quality assurance points, stating this was more practical and allowed for differentiation around the urgency of the situation in relation to animal welfare.

Other feedback called for the department to take action to address infrastructure limitations at some registered establishments. Other suggestions included that a maximum timeframe of no longer than 12 hours be added to the definition of 'first reasonable opportunity', that rejected animals should be removed without delay in all circumstances and that 'without delay' be added to the definitions to include 'within 15 minutes' of identification.

### Department response:

The proposed amendments have been finalised with changes.

The department has modified the proposed amendments to include:

- 'where feasible, or at the first reasonable opportunity' to the requirement for rejected animals to be visually marked upon identification,
- 'where feasible, or at the first reasonable opportunity' to the requirement for rejected animals that are not suffering to be isolated upon identification. The word 'rejected' has also been included before 'animal' in this provision, and
- 'at the next management procedure and/or...' has been added to the definition of 'first reasonable opportunity'.

The changes to standard 3.1.15 allow for greater flexibility regarding timing of marking and removal of rejected livestock, balancing the best animal health and welfare outcomes with the management practices and infrastructure constraints at some registered establishments.

The changes align with multiple reviews indicating that changes are required to improve animal welfare outcomes and to promote compliance with ASEL.

The changes also address stakeholder concerns that repeated handling and disturbance of livestock to remove a reject (that is not injured or suffering distress), may cause increased stress and have adverse animal welfare outcomes for the rest of the mob.

### Amended standard and definition for ASEL 3.3

*(This version of Standard 3.1.15 comes into force on 29 August 2024)*

**3.1.15** Livestock must be individually inspected at unloading, and inspected at least daily, to determine whether they are suitable for preparation for export.

- a) Any animal must be rejected from the consignment if they:
  - i) are identified as being distressed or injured, or

- ii) have a condition that could be defined as an infectious or contagious disease, or
  - iii) have a condition where the animal's health or welfare could decline, or
  - iv) could suffer distress during the export process, or are otherwise unsuitable for export (including the rejection criteria outlined in Standard 1 Table 1), or
  - v) do not meet importing country requirements.
- b) All rejected animals must be individually visually marked upon identification where feasible, or at the first reasonable opportunity, by a semi-permanent or permanent method.
- c) Isolation of rejected animals from the rest of the consignment:
- i) must occur upon identification if the rejected animal is injured or suffering distress, or
  - ii) must occur upon identification where feasible, or at the first reasonable opportunity, if the rejected animal has an infectious or contagious disease, or
  - iii) should occur upon identification where feasible or at the first reasonable opportunity if the rejected animal is not suffering distress or does not have an infectious or contagious disease.
- d) Arrangements must be made for the prompt and humane handling, treatment and care of rejected livestock, including:
- i) provision of treatment to all sick or injured livestock; and
  - ii) provision of veterinary advice if the cause of a sickness or injury is not obvious, or if action taken to prevent or treat the problem is ineffective; and
  - iii) where required euthanasia and/or disposal, in compliance with all relevant and applicable legislation.
- e) All rejected animals must be removed from the consignment prior to being loaded for departure from the registered establishment to the port of embarkation.

#### **Added to definitions**

At the '*first reasonable opportunity*' means at the next management procedure and / or within a timeframe that would be expected by a reasonable person with the relevant knowledge, skills and experience in the management of livestock given the urgency of the situation in relation to the welfare of the livestock.

### **The number of clear days livestock spend in a Registered Establishment**

#### **Summary of feedback:**

Some feedback supported the proposed amendments, stating they align with research from Murdoch University that indicates shearing can be undertaken during clear days at a registered establishment without negative animal welfare impacts.

Other feedback suggested increasing the number of clear days livestock are required to spend at a registered establishment (for example, that the number of clear days required for cattle increase from 2 days to 5 days), however, no science or evidence was provided to support these suggestions.

There were suggestions for clear days to be consecutive and implemented at a single registered establishment. The changes to the definition of 'clear day' were recommended by the Technical Advisory Committee (TAC) in recommendation 8 of the ASEL review.

Concerns were also raised that the proposed amendments could result in additional days spent in a registered establishment for cattle and buffalo.

**Department response:**

The proposed amendments have been finalised with changes.

The department acknowledges that greater clarity around the wording of the proposed amendments was required. The proposed amendments have been modified in response to internal and external feedback.

The changes to standard 3.7.7 address the risk of poor rumen function, salmonellosis and inanition in sheep due to time off feed and water (curfew), not simply due to the act of shearing. The changes provide clarity regarding when an additional clear day is required for sheep in a registered establishment.

Inclusion of the statement 'A day on which an animal is subject to a feed or water curfew is not a clear day' in standards 3.7.7, 3.2.2, 3.4.2 and 3.4.6 provides greater clarity regarding what constitutes a clear day.

The changes to standards 3.7.1 and 3.7.2 rectify an error in wording by removing the incorrect inclusion of the word 'clear'.

Finally, the updated definition of a clear day more closely reflects the wording used by the Technical Advisory Committee (TAC) in recommendation 8 of the Review of the Australian Standards for the export of Livestock: Sea Transport, Final Report (2019).

**Amended standards and definition for ASEL 3.3**

*(These versions of Standards 3.7.7, 3.7.1, 3.7.2, 3.2.2, 3.4.2 and 3.6.4 come into force on 29 August 2024)*

**Sheep management requirements**

**3.7.7** The minimum length of time that sheep must remain in a registered establishment prior to departure for the port is 5 clear days. A day on which animals are subject to a feed or water curfew is not a clear day. In addition to the above:

- a) If a feed or water curfew is longer than 12 hours, an additional clear day is required (that is, 6 clear days); and
- b) During at least the last 3 clear days prior to export, sheep are to be fed *ad libitum* on a ration equivalent in both form and composition to that which is to be used on the export voyage.

**3.7.1** Sheep that are 10 days or more off shears may be accommodated in paddocks at the registered establishment.

**3.7.2** Sheep that are less than 10 days off shears must be:

- c) given at least 2 clear days between shearing and loading for export, and
- d) accommodated in sheds at the registered establishment, unless otherwise provided in an accommodation of shorn sheep management plan approved in writing by the department.

**Buffalo management requirements**

**3.2.2** The minimum length of time that buffalo must remain in a registered establishment prior to departure for the port is 5 clear days. A day on which an animal is subject to a feed or water curfew is not a clear day.

**Cattle management requirements**

**3.4.2** The minimum length of time that cattle must remain in a registered establishment prior to departure for the port is 2 clear days for short or long-haul voyages, or 3 clear days for extended long-haul voyages. A day on which an animal is subject to a feed or water curfew is not a clear day.

#### **Goat management requirements**

**3.6.4** The minimum length of time that goats must remain in a registered establishment prior to departure for the port is 5 clear days. A day on which an animal is subject to a feed or water curfew is not a clear day. During at least the 3 clear days prior to export, goats are to be fed ad libitum on a ration equivalent in both form and composition to that which is to be used on the voyage.

#### **Definition of clear day**

Clear day means a full day (midnight to midnight) not including the day of arrival at the registered establishment for export preparation, or the day of loading for export at the registered establishment, during which livestock are not subject to a feed or water curfew. Clear days apply to the animal rather than at a whole-of-consignment level.

### **Record-keeping requirements for Registered Establishments**

#### **Summary of feedback:**

There was broad support for the intent of the proposed amendments to record-keeping requirements in registered establishments, with some suggesting minor changes.

Concerns were raised regarding the scope of record-keeping requirements, especially relating to the timing and spatial limits.

Feedback included a suggestion to record the date of arrival at, and departure from, the registered establishment.

#### **Department response:**

The proposed amendments have been finalised with changes.

The department has modified the proposed amendments in response to feedback. A record of arrival and departure dates has been included as a requirement as these dates are relevant to the timing of clear days. A typographical error (disembarkation) has also been corrected.

The department notes the current standard already specifies when record-keeping must commence (from the time of unloading of livestock at the registered establishment), when it extends to (to the time of loading for transport to the port of embarkation) and for how long records must be retained (for at least 2 years after the date of export).

The changes to standard 3.8.1 clarify registered establishments' record-keeping responsibilities by specifying which animal records they must retain. Clarifying these record-keeping requirements will facilitate compliance with ASEL, avoid confusion amongst stakeholders and reduce unnecessary, additional administration.

### **Amended standard for ASEL 3.3**

*(This version of Standard 3.8.1 comes into force on 29 August 2024)*

**3.8.1** Animal records must be kept by the registered establishment occupier in accordance with the registered establishment operations manual, from the time of unloading of livestock at the registered establishment to their loading for transport to the port of embarkation and retained for at least 2 years after the date of export. These must include:

- a) the animal's identification in accordance with state and territory and NLIS requirements; and

- b) all management procedures that occur in the registered establishment relevant to export preparation and date(s) undertaken; and
- c) all veterinary medicines and treatments provided by the registered establishment to livestock undergoing export preparation (including species, treatment date(s), trade name or active ingredient, batch number and if used according to manufacturer's directions. If not used according to manufacturer's directions, the dose administered is to be included); and
- d) daily inspections by competent stock handlers of livestock health, welfare and appropriateness for export; and
- e) any mortality, sickness, injury or other sign consistent with the rejection criteria found, and actions taken to identify and remove any rejected livestock from the consignment, including location of rejected livestock, handling, care, treatment, euthanasia and/or disposal; and
- f) the date of arrival at, and departure from, the registered establishment; and
- g) all other information required to demonstrate compliance with the relevant ASEL standards.

### **When an accredited veterinarian (AAV) or stockperson must accompany a voyage**

#### **Summary of feedback:**

Some feedback was supportive of the additional circumstances when an AAV must accompany a voyage, stating it was helpful to incorporate information from a policy document and export advisory notice into ASEL. However, other feedback claimed the additional circumstances did not go far enough, calling for an AAV on every voyage.

Concerns were raised that generally; stockpersons did not have the skills or training in animal disease, diagnosis, and treatment to act as a substitute for an AAV.

Other commentary focused on the proposed insertion of the wording 'for the duration of the voyage', which uses the in-place ASEL definition of 'voyage'. Some supported the change, stating it simplified the standards, however, others were concerned there could be confusion around the definition and preferred the full definition to be included in the standard.

#### **Department response:**

The proposed amendments have been finalised without further changes.

The changes to standard 4.1.9 now include all the circumstances in which an AAV must accompany a consignment of livestock exported by sea, to align ASEL 3.3 with requirements outlined in an Export Advisory Notice for Veterinarians accompanying livestock by sea (EAN 2016-14 – now removed) and the policy document entitled AAVs and stockpersons on sea voyages – applying for alternative arrangements in accordance with ASEL.

The changes to standard 4.1.8 and 4.1.9 also clarify the intent of the standards to have an accredited stockperson or AAV accompany each consignment of livestock for the duration of the voyage, referring to the ASEL definition of voyage.

### **Amended standards for ASEL 3.3**

*(These versions of Standards 4.1.8 and 4.1.9 come into force on 30 November 2023)*

**4.1.8** An accredited stockperson who is employed or contracted by the exporter must be appointed to accompany each consignment of livestock for the duration of the voyage. The accredited stockperson must not be a member of the vessel's crew.

**4.1.9** Unless the exporter has approval under Standard 4.1.10, an AAV must accompany each consignment of livestock for the duration of the voyage in these circumstances:

- a) if the voyage is expected to be an extended long-haul voyage; or
- b) on voyages with pregnant livestock; or
- c) if the vessel is travelling to or through the Middle East; or
- d) if the vessel is new or has had a significant structural change or re-fit; or
- e) if the consignment is the first consignment for the exporter; or
- f) any other voyage when required by the department.

## The definition of near and far markets

### Summary of feedback:

There was widespread agreement with this proposed change among animal welfare organisations, however some suggested that all cattle should be granted the higher pen space allocation, regardless of whether they travel on short-haul or long-haul consignments. No science or evidence was provided to support this suggestion.

Some industry bodies supported a regulatory setting based on the use of an objective measurement of voyage length but stated that the department did not provide evidence that cattle travelling under inappropriately small pen space allocations experienced poorer animal welfare outcomes. They called for the department to analyse welfare data from voyages to determine if differences in welfare outcomes exist between cattle given different pen space allocations.

Industry also sought clarification around the application of Tables 10a and 10b considering the changes to their titles. Their concern was that some cattle travelling on voyages of 10 days or more with multiple discharge ports may not be able to access the appropriate pen space, particularly if travelling short-haul.

### Department response:

The proposed amendments have been finalised with changes.

Following consultation, the department identified that the title of Tables 10a and 10b referred to '*consignments*' of cattle, meaning the pen space allocation is applied at a consignment level, rather than individual animal level. There are occasions where a single consignment may carry cattle to multiple discharge ports, with some travelling short-haul, and others in the same consignment travelling long-haul. The word '*consignments*' will be removed in the titles of Tables 9, 10a, 10b, 11a, 11b, 12a, 12b, and Standards 5.3.2, 5.3.3, 5.3.4 and 5.3.5 on 30 November 2023 to facilitate the tables being applied to the individual animal.

An additional footnote has been added to Tables 10a and 10b to clarify that the alternative minimum pen space allocations must be applied based on the length of voyage for individual cattle. In practice, this means that each individual animal in a pen would receive the appropriate alternative minimum pen space required, based on the length of voyage they are undertaking.

Following consultation, the department identified one further reference to near and far markets, in standard 5.3.3. To align with changes to the title of Tables 10a and 10b, '*near markets*' has been replaced with '*short-haul*' and '*far markets*' has been replaced with '*long-haul*'.

Further engagement with industry regarding the associated minimum recommended voyage length policy will be undertaken by the department as part of implementation policy consultation and development.

The changes remove the ineffective near and far market definitions. Data analysis indicated the current geographical demarcation of near and far markets (introduced in ASEL 3.1 to approximate a typical 10-day voyage)

was ineffective in predicting voyage length and that significant numbers of cattle exported from northern Australia travel under inappropriate pen space allocations.

### **Amended table titles and standard and deleted definitions for ASEL 3.3**

*(These versions of the titles of Tables 10a and 10b, definitions and Standard 5.3.3 come into force on 3 April 2024)*

#### **Tables**

Table 10a Alternative minimum pen space allocation for cattle loaded at a port north of latitude 26°S where an exporter is approved to use the alternative pen space – short-haul

Table 10b Alternative minimum pen space allocation for cattle loaded at a port north of latitude 26°S where an exporter is approved to use the alternative pen space – long-haul

#### **Footnote for Tables 10a and 10b:**

*Alternative minimum pen space allocation must be applied according to the length of voyage for individual cattle.*

**5.3.3** Standard 5.3.2 applies unless an exporter is approved in writing under their approved arrangement to use alternative pen space for cattle loaded at a port north of latitude 26°S to a particular destination. The alternative pen space allocation is contained in Table 10a for short-haul. Table 10b contains the alternative pen space allocation for long-haul. For weights between those shown in Table 10a or those shown in Table 10b, the minimum pen area per head must be calculated by linear interpolation. Daily reports must be provided as set out in Standard 5.6.6.

**Delete near market and far market definitions.**

### **The requirement for contingency plans for escaped livestock – Sea and Air**

#### **Summary of feedback:**

There was broad support for the proposed amendments. Some feedback stated that it was preferable to have export requirements written into an ASEL standard rather than conveyed in an export advisory notice. There were many suggestions to include the unloading process in the contingency plan.

#### **Department response:**

The proposed amendments have been finalised with changes.

Following consultation, the department identified an inconsistency in the wording between sea and air contingency plan requirements regarding contact ‘*details*’ or ‘*procedures*’ for contacting the exporter. The word ‘*details*’ in standard 6.1.29 has been replaced with ‘*procedures*’ to align with the wording in standard 4.1.18.

The proposed changes incorporate the content of EAN 2012-07 (Contingency plans for escaped of livestock) which required exporters to have a contingency plan for dealing humanely with livestock that escape during the process of loading a vessel. The changes to this standard will ensure exporters have identified the course of action to respond appropriately in the event of escaped livestock at the port of departure.

Some feedback suggested incorporating the unloading process into the contingency plan. This suggestion has been recorded for further consideration after the 2023 ASEL update.

### **Amended standards for ASEL 3.3**

*(These versions of Standard 4.1.18 and 6.1.29 come into force on 30 November 2023)*



**4.1.18** Contingency plans, including procedures for contacting the exporter, must be prepared in writing for each consignment that address:

- a) mechanical breakdown of the vessel or functionality relevant to maintaining the livestock's health and welfare; and
- b) a feed and/or water shortage during the voyage; and
- c) the satisfactory tending, feeding and watering of the livestock in the event of a malfunction of the automatic feeding or watering systems, without compromising the safe navigation of the vessel; and
- d) an outbreak of a disease during the voyage; and
- e) adverse weather conditions during the voyage; and
- f) rejection of the consignment by the overseas country; and
- g) procedures for the humane recapture of livestock that escape during the loading process.

**6.1.29** Contingency plans for an air export journey, including procedures for contacting the exporter, must be prepared in writing for each consignment that address:

- a) unavailability of the aircraft to be used for the air transportation; and
- b) mechanical breakdown, including partial or full disablement of the ventilation system; and
- c) rejection of the consignment, by the importing country; and
- d) diversion and landing at a location different from the intended transit stop(s) or destination and how the welfare of animals will be overseen; and
- e) euthanasia on board the aircraft if a competent stock handler is accompanying livestock, if livestock are accessible and if it is safe to do so, or as soon as possible after unloading from the aircraft; and
- f) procedures for the humane recapture of livestock that escape during the loading process.

## Penning requirements for horned cattle

### Summary of feedback:

Industry members generally supported the proposed amendments stating they allowed for added flexibility in penning arrangements for horned cattle and would improve animal welfare. One industry member stated they had no reports of injury caused by horned cattle in their facilities. Some feedback raised concerns that cattle with longer horns posed an increased risk of injury and / or entrapment which may result in poorer welfare outcomes.

Feedback provided a range of alternative suggestions for cattle horn length requirements, including that cattle with horns up to 16 cm should be able to be exported, and that cattle with horns longer than 2.5 cm should not be able to be exported. No science or evidence was provided to support these suggestions.

Some feedback called for the rejection criteria guidebooks to be updated with photos to demonstrate non-eligible animals.

### Department response:

The proposed amendments have been finalised without further changes.

The proposed changes to standards 1.4.8 and 5.3.1 allow for added flexibility in penning arrangements for horned cattle and reflect the different risk profile for cattle with horns that point downwards parallel to the face, compared to cattle with outward-projecting horns.

### Amended standards for ASEL 3.3

(These versions of Standards 1.4.8 and 5.3.1 come into force on 30 November 2023)

**1.4.8** Cattle with horns must only be sourced for export or exported if the solid non-vascular tip has been removed to a diameter of 3cm (or less if the horn vasculature does not allow) and horns have a blunt horn end; and

- a) horns are no longer than 12cm in length at the time of export, unless otherwise provided in a *long-horned livestock management plan* approved in writing by the department, or
- b) horns are longer than 12cm in length at the time of export and are pointing downwards parallel to the face and do not show signs consistent with the rejection criteria specified in Table 1.

**5.3.1** The minimum pen space allocations for cattle exported by sea are contained in Table 9, Table 10a, Table 10b, Table 11a, Table 11b, Table 12a and Table 12b. These penning criteria apply:

- a) where a curfew of more than 12 hours will be undertaken at the registered establishment prior to transport to the port of embarkation, a curfew factor of an additional 5% must be applied when calculating liveweight (cumulative with other additional space requirements and must be calculated first); and
- b) the weight of each animal in a pen must not vary from pen average weight by more than 50kg. The pen average weight is calculated by dividing the total weight of the cattle in the pen by the number of cattle in the pen; and
- c) for pregnant cattle, a minimum additional 15% space must be provided; and
- d) cattle without horns may be penned with cattle with:
  - i) horns up to 12cm in length and where the horns are tipped (blunt); and / or
  - ii) horns longer than 12cm in length and are pointing downwards parallel to the face and where the horns are tipped (blunt); and
- e) cattle outside of the weights shown in Table 9, Table 10a, Table 10b, Table 11a, Table 11b, Table 12a and Table 12b must only be sourced for export or exported in accordance with a *light or heavy cattle management plan* where an exporter has approval under Standard 1.4.2.

### Penning requirements for horned sheep

#### Summary of feedback:

Animal welfare organisations agreed with inclusion of ‘*during the export process*’ in sheep horn standard however some industry bodies stated the wording was unclear and too broad.

Some animal welfare organisations suggested to reduce the horn length limit for sheep to half a curl however did not provide any science or evidence to support this suggestion.

Other feedback commented that the use of the word ‘*endanger*’ in standard 1.7.7b (‘*horns that would not endanger the animal or other animals*’) was too vague, subjective, difficult to enforce, and could lead to inconsistencies in interpretation. Some also called for greater consistency in the use of the words ‘*would*’ and ‘*could*’.

#### Department response:

The proposed amendments have been finalised with changes.

The terms *'during the export process'* and *'export process'* are not defined in ASEL. The department acknowledges that without a definition, the addition of *'during the export process'* is very broad, vague and may result in inconsistencies in interpretation. In response, the department will revert to the wording *'during transport'* and a definition of *'export process'* will be given further consideration after the 2023 ASEL update. Also, to improve clarity and consistency, and to align with the changes to the Rejection Criteria tables, in standard 1.7.7 the word *'endanger'* has been changed to *'injure'* and the word *'would'* has been changed to *'could'*.

The changes to standard 5.5.1 inserts the word *'full'* (curl) to provide consistency with the current sourcing requirements outlined in standard 1.7.7. The changes also align with recommendation 33 of the Technical Advisory Committee (TAC) which advises that any horned sheep (not only rams) with horns longer than one full curl require 10% additional pen space.

### **Amended standards for ASEL 3.3**

*(These versions of Standards 1.7.7 and 5.5.1 come into force on 30 November 2023)*

**1.7.7** Sheep with horns must not be sourced for export or exported if the horns:

- a) could cause damage to the head or eyes of the animal or other animals during transport; and
- b) could injure the animal or other animals during transport; and
- c) could restrict access to feed or water during transport; and
- d) are more than 1 full curl, unless otherwise provided for in a long-horned livestock management plan approved in writing by the department, or show signs consistent with the rejection criteria specified in Table 1.

**5.5.1** The minimum pen space allocation for sheep is contained in Table 19. These penning criteria also apply:

- a) where a curfew of more than 12 hours will be undertaken at the registered establishment prior to transport to the port of embarkation, a curfew factor of an additional 5% must be applied when calculating liveweight (cumulative with other additional space requirements and must be calculated first); and
- b) for weights between those shown in Table 19 the minimum pen area per head must be calculated by linear interpolation; and
- c) [deleted]
- d) sheep without horns may be mixed with sheep with horns up to 1 full curl in length; and
- e) sheep exported in accordance with a long-horned livestock management plan approved in writing by the department under Standard 1.7.7 d) must be allocated an additional 10% space.

### **Clarifying livestock identification requirements in laboratory test reports – Sea and Air**

#### **Summary of feedback:**

Most feedback supported the proposed amendments.

Feedback identified that exporters would need to provide very clear animal identification data for samples sent to a laboratory for testing. Laboratories offered varying accounts of how they would meet new requirements. One laboratory stated that significant lead-in time would be required to meet the new requirements, with another stating they had already started to implement the changes.

One industry body did not agree with the proposed amendment stating that the current processes worked well. They queried whether the reduced administrative burden on the department following the change would translate to lower fees to the exporter.

**Department response:**

The proposed amendments have been finalised with changes.

The words *'results of tests undertaken'* have been added to the standards to further clarify requirements. The department acknowledges that a single laboratory report may include several documents in different formats, so have replaced the word *'document'* with the word *'report'*.

The changes address the risk of misinterpretation of laboratory test reports, provide clearer instructions and requirements for identifying livestock in laboratory test reports and improve identification of animals that are ineligible for export, facilitating their removal.

Further engagement with laboratories regarding implementation lead-in time was undertaken by the department as part of implementation policy consultation and development.

**Amended standards for ASEL 3.3**

*(These versions of Standards 1.1.3 and 6.1.3 come into force on 3 April 2024)*

**1.1.3** Livestock sourced for export must be:

- a) identified in accordance with state and territory and National Livestock Identification System (NLIS) requirements; and
- b) traceable to the property of source; and
- c) accompanied by correctly completed and signed movement records such as NVDs/waybills; and
- d) individually identified where testing, including pregnancy testing, is required during preparation, excluding feeder/slaughter sheep and goats where the pregnancy testing certification may identify animals to a mob-based level; and
- e) accompanied by any test results, including all pregnancy testing and spay declarations where applicable. Laboratory test reports must include the results of the testing undertaken and the below information in a single report:
  - i) the NLIS identification number of the animal where individual identification is required by state or territory legislation,
  - ii) the PIC where the animal was sampled, and
  - iii) the visual tag number of the animal (if applied).

**6.1.3** Livestock sourced for export must be:

- a) identified in accordance with state and territory and National Livestock Identification System (NLIS) requirements; and
- b) traceable to the property of source; and
- c) accompanied by correctly completed and signed movement records such as NVDs/waybills; and
- d) individually identified where testing, including pregnancy testing, is required during preparation, excluding feeder/slaughter sheep and goats where the pregnancy testing certification may identify animals to a mob-based level; and

e) accompanied by any test results, including all pregnancy testing and spay declarations where applicable. Laboratory test reports must include the results of testing undertaken and the below information in a single report:

- i) the NLIS identification number of the animal where individual identification is required by state or territory legislation,
- ii) the PIC where the animal was sampled, and
- iii) the visual tag number of the animal (if applied).

## Rejection criteria tables – Sea and Air

### Summary of feedback:

Feedback identified that the wording *'horns that would endanger the animal or other animals'* was too vague, subjective, difficult to enforce, and could lead to inconsistencies in interpretation. Other feedback stated that the wording *'horns longer than appropriate for export'* did not provide adequate clarity around horn requirements and suggested including horn length limits in the tables.

Some feedback questioned the use of the word *'would'* in rejection criteria (for example *'horns that would restrict access to feed or water'*), suggesting that *'could'* is more appropriate.

Concerns were also raised on the appropriateness of including wool and horn lengths in the table as management practices can be implemented after sourcing to meet eligibility criteria (for example, shearing or horn trimming).

### Department response:

The proposed amendments have been finalised with changes.

The department acknowledges feedback that management practices (such as shearing and horn tipping) can occur after sourcing, so livestock meet eligibility criteria and this has been noted in each table to clarify requirements. Horn length limits for sheep and cattle have been included within the tables, in response to feedback. Footnotes have also been added to the tables to note exceptions to horn and wool length rejection criteria. The word *'would'* has been replaced with *'could'*, to more appropriately address risk levels.

Internal and external consultation identified that it is livestock that don't meet wool length and horn requirements that are most frequently *'missed'* during the reject management process. Therefore, the department considers it is useful to reinforce wool length and horn requirements by adding them to the rejection criteria tables.

## Amended tables for ASEL 3.3

*(These versions of Table 1 and Table 23 come into force on 30 November 2023)*

### Table 1 Rejection criteria for all species by sea

NB: For some rejection criteria, management procedures may occur after sourcing so livestock meet eligibility criteria at the time of export.

Category	Rejection criteria
General requirements	<ul style="list-style-type: none"> <li>• Sheep wool or hair longer than 25mm*</li> <li>• Failure to meet importing country requirements including sex or breed if specified</li> <li>• Pregnancy status not confirmed as appropriate for export</li> <li>• Lactating animals/lactating animals with young at foot</li> <li>• Viral diseases such as scabby mouth or infectious bovine rhinotracheitis</li> <li>• Animals displaying clinical signs of infectious or contagious disease or external parasites</li> <li>• Animals showing signs of injury such as but not limited to fractures or swelling</li> </ul>

Category	Rejection criteria
Systemic conditions	<ul style="list-style-type: none"> <li>• Body condition score not appropriate for export (such as emaciated or over-fat)</li> <li>• Anorexia (inappetence or 'shy feeders')</li> <li>• Uncoordinated, collapsed, weak</li> <li>• Unwell, lethargic, dehydrated</li> <li>• Ill-thrift</li> </ul>
Gastrointestinal system	<ul style="list-style-type: none"> <li>• Dysentery or profuse diarrhoea</li> <li>• Bloat</li> </ul>
Musculoskeletal system	<ul style="list-style-type: none"> <li>• Abnormal gait or lameness of any kind</li> <li>• Abnormal soft tissue or bony swellings</li> </ul>
Nervous system	<ul style="list-style-type: none"> <li>• Nervous symptoms such as head tilt, circling, incoordination</li> <li>• Abnormal or aggressive behaviour/intractable or violent</li> </ul>
External/skin	<ul style="list-style-type: none"> <li>• Generalised papillomatosis or generalised ringworm or dermatophilosis</li> <li>• Generalised and extensive buffalo fly lesions</li> <li>• Generalised skin disease or infection</li> <li>• External skin cancer</li> <li>• Lacerations that penetrate the full thickness of the dermis or are likely to affect the health or welfare of the animal</li> <li>• Discharging wounds or abscesses</li> <li>• Cutaneous myiasis (flystrike)</li> <li>• Balanitis (pizzle rot in sheep)</li> <li>• Blood/abnormal discharge from reproductive tract (vulva/prepuce)</li> <li>• Visible external parasites</li> </ul>
Head	<ul style="list-style-type: none"> <li>• Blindness in 1 or both eyes</li> <li>• Cancer eye</li> <li>• Keratoconjunctivitis (pink eye)</li> <li>• Excessive salivation</li> <li>• Nasal discharge consistent with signs of a contagious or infectious disease</li> <li>• Coughing consistent with signs of a contagious or infectious disease</li> <li>• Respiratory distress or difficulty breathing</li> <li>• Sharp horns</li> <li>• Horns that could injure the animal or other animals</li> <li>• Horns that could restrict access to feed or water</li> <li>• Bleeding and/or not fully healed horn stumps or broken antlers</li> <li>• For sheep, horns longer than 1 full curl*</li> <li>• For cattle, horns longer than 12cm**</li> <li>• Scabby mouth</li> </ul>
Other	<ul style="list-style-type: none"> <li>• Groups of animals with unusual mortalities</li> <li>• Disparities in sex, size, weight or age that could cause an issue with the health or welfare of the animals (redraft animals in this case)</li> </ul>

\* unless otherwise provided in a relevant management plan approved in writing by the department

\*\* horns may be longer than 12cm if they are pointing downwards parallel to the face or unless otherwise provided in a relevant management plan approved in writing by the department

### Table 23 Rejection criteria for all species by air

NB: For some rejection criteria, management procedures may occur after sourcing so livestock meet eligibility criteria at the time of export.

Category	Rejection criteria
General requirements	<ul style="list-style-type: none"> <li>• Failure to meet importing country requirements including sex or breed if specified</li> <li>• Pregnancy status not confirmed as appropriate for export</li> <li>• Viral diseases such as scabby mouth or infectious bovine rhinotracheitis</li> <li>• Animals displaying clinical signs of infectious or contagious disease or of external parasites</li> <li>• Animals showing signs of injury such as but not limited to fractures or swelling</li> <li>• Evidence of imminent parturition</li> </ul>
Systemic conditions	<ul style="list-style-type: none"> <li>• Body condition score not appropriate for export (such as emaciated or over-fat)</li> <li>• Anorexia (inappetence or 'shy feeders')</li> <li>• Uncoordinated, collapsed, weak</li> <li>• Unwell, lethargic, dehydrated</li> <li>• Ill-thrift</li> </ul>
Gastrointestinal system	<ul style="list-style-type: none"> <li>• Dysentery or profuse diarrhoea</li> <li>• Bloat</li> </ul>
Musculoskeletal system	<ul style="list-style-type: none"> <li>• Abnormal gait or lameness of any kind</li> <li>• Abnormal soft tissue or bony swellings</li> </ul>
Nervous system	<ul style="list-style-type: none"> <li>• Nervous symptoms such as head tilt, circling, incoordination</li> <li>• Abnormal or aggressive behaviour/intractable or violent</li> </ul>
External/skin	<ul style="list-style-type: none"> <li>• Generalised papillomatosis or generalised ringworm or dermatophilosis</li> <li>• Generalised and extensive buffalo fly lesions</li> <li>• Generalised skin disease or infection</li> <li>• External skin cancer</li> <li>• Lacerations that penetrate the full thickness of the dermis or are likely to affect the health or welfare of the animal</li> <li>• Discharging wounds or abscesses</li> <li>• Cutaneous myiasis (flystrike)</li> <li>• Balanitis (pizzle rot in sheep)</li> <li>• Blood/abnormal discharge from reproductive tract (vulva/prepuce)</li> <li>• Visible external parasites</li> </ul>
Head	<ul style="list-style-type: none"> <li>• Blindness in 1 or both eyes</li> <li>• Cancer eye</li> <li>• Keratoconjunctivitis (pink eye)</li> <li>• Excessive salivation</li> <li>• Nasal discharge consistent with signs of a contagious or infectious disease</li> <li>• Coughing consistent with signs of a contagious or infectious disease</li> <li>• Respiratory distress-difficulty breathing</li> <li>• Sharp horns</li> <li>• Horns that could injure the animal or other animals</li> <li>• Horns that could restrict access to feed or water</li> <li>• Bleeding and/or not fully healed horn stumps or broken antlers</li> <li>• For sheep, horns longer than 1 full curl*</li> <li>• For cattle, horns longer than 12cm**</li> <li>• Scabby mouth</li> </ul>
Other	<ul style="list-style-type: none"> <li>• Groups of animals with unusual mortalities</li> <li>• Disparities in sex, size, weight or age that could cause an issue with the health or welfare of the animals (redraft animals in this case)</li> </ul>

\* unless otherwise provided in a relevant management plan approved in writing by the department

\*\* horns may be longer than 12 cm if they are pointing downwards parallel to the face or unless otherwise provided in a relevant management plan approved in writing by the department.

## Reserve fodder requirements

### Summary of feedback:

Feedback varied on this matter, with several alternative reserve fodder requirements proposed. Alternative suggestions included to carry an additional 20% or 3 days of reserve feed to harmonise with Marine Order 43 in relation to back-up power and water level requirements, to revert to ASEL 2.3 levels, or to carry an additional 30% or 2 days of reserve fodder. No science or evidence was provided to support these suggestions. Initially industry did not support the department's preferred option (3) but later requested this option be implemented for Indonesian voyages on a temporary basis.

One industry body stated there did not appear to be systemic issues with feed availability.

There was broad support amongst some stakeholders for a minimum recommended voyage length policy, with some suggesting there should be no change to current reserve fodder requirements unless this policy is adopted.

Some feedback suggested weight verification of livestock at the port via weighbridge to improve accuracy and minimize the risk of inadequate fodder provision onboard.

### Department response:

The proposed amendments have been finalised with changes.

Following public consultation, another option (Option 4) was identified for consideration which combines Options 1 and 3:

**Option 4:** *To manage daily feed requirements when a voyage experiences a delay, a minimum of:*

- a) 20% or 2 days of reserve feed, whichever is greater, must be loaded on the vessel for consignments of less than 15 days; or
- b) 3 days of reserve feed must be loaded on the vessel for consignments of 15 days or greater.

Under Option 4, the reserve feed requirement:

- decreases from 3 days to 2 days for consignments less than 10 days, and
- increases incrementally up to 3 days for consignments between 10 and 15 days (i.e. 2.2 for 11 days, 2.4 for 12 days etc.), and
- is a minimum of 3 days for consignments of 15 days or more, and
- remains unchanged for extended long-haul consignments.

Options 1 and 3 were both modelled and provided for public consultation. The data set included all cattle consignments departing Australia to all single destination ports and regions from 1 November 2020 to 31 December 2022 (accounting for around 80% of all cattle exports). Of these, 85% completed the voyage in less than 15 days.

This analysis indicated that if the issue of voyage length underestimation is resolved, both Options 1 and 3 provide assurance that reserve fodder levels would be adequate in the event of a voyage delay. Therefore, the revised reserve feed requirements in Option 4, when implemented with a minimum recommended voyage length policy, provides sufficient assurance for voyages (both less than and greater than 15 days) and reduces the financial impact of reserve fodder requirements for some voyages (< 15 days).

The suggestion for weight verification of livestock by using a weighbridge at the port is outside the scope of the 2023 ASEL review and is an operational policy matter. It has been recorded for consideration in a separate process.



### Amended standard for ASEL 3.3

*(This version of Standard 5.1.15 comes into force from 3 April 2024)*

**5.1.15** To manage daily feed requirements when a voyage experiences a delay, a minimum of:

- a) 20% or 2 days of reserve feed, whichever is greater, must be loaded on the vessel for consignments of less than 15 days, or
- b) 3 days of reserve feed must be loaded on the vessel for consignments of 15 days or greater.

The reserve feed requirement is in addition to the calculated daily feed provisions for the recommended voyage length. Reserve feed must only be used if a delay is experienced during the voyage.

### Competent stock handler on aircraft

#### Summary of feedback:

Most feedback acknowledged the logistical difficulty of inspecting and accessing livestock during flights, however, some animal welfare organisations suggested a competent stock handler should accompany every flight to ensure livestock could be inspected and/or treated at appropriate times. An animal welfare organisation suggested that closed circuit television (CCTV) cameras on aircraft could provide additional oversight, particularly if a competent stock handler was unable to travel with livestock.

Feedback varied on the proposed use of environmental data loggers in crates during air transport. Some supported the use of data loggers stating they would provide additional information for the department's consideration. Some industry members questioned the benefit of placing data loggers in crates, stating they could be easily damaged by livestock and temperature measurement systems on aircraft were already in place. Other feedback questioned the practicality of attaching and retrieving loggers from disposable crates.

#### Department response:

The proposed amendments have been finalised without further changes.

The deletion of standards 6.1.24 and 6.1.25 acknowledges the findings from the Technical Advisory Committee (TAC) which noted *'that the opportunity for, and welfare benefits of, inspecting livestock during flight are limited.'* The changes also align ASEL with airline protocols and International Air Transport Association (IATA) regulations which impose restrictions on accessing cargo holds during flights.

The changes to standard 6.1.26 (b) acknowledge findings from the TAC which identified that in-air livestock inspection may create higher stress levels in animals. IATA regulations and industry best-practice research echo this view, that livestock travel best if they are disturbed as little as possible during the flight.

The changes in standards 6.1.27 and 6.1.29 simplify wording by using the existing ASEL definition of *'air export journey'*.

### Amended standards for ASEL 3.3

*(These versions of the Standards 6.1.24, 6.1.25, 6.1.26, 6.1.27 and 6.1.29 come into force on 30 November 2023)*

**6.1.24** [deleted]

**6.1.25** [deleted]

**6.1.26** Livestock must be checked by a competent stock handler appointed by the exporter to ensure they remain healthy and fit to travel for all flights:

- a) at the last reasonable opportunity before departure of the aircraft; and

- b) [deleted]
- c) at the first reasonable opportunity after landing, including during transit/transshipment stops; and
- d) at the last reasonable opportunity before departure including during any transit/transshipment stops.

**6.1.27** During the air export journey, any livestock identified as being distressed or injured must, where feasible:

- a) be given prompt treatment; and/or
- b) be euthanased without delay as necessary; and
- c) arrangements must be made to remove or separate sick or dead livestock from pens carrying multiple animals in transit. If animals need to be unloaded, arrangements must be made to ensure the health and welfare of the animals.

**6.1.29** Contingency plans for an air export journey, including procedures for contacting the exporter, must be prepared in writing for each consignment that address:

- a) unavailability of the aircraft to be used for the air transportation; and
- b) mechanical breakdown, including partial or full disablement of the ventilation system; and
- c) rejection of the consignment, by the importing country; and
- d) diversion and landing at a location different from the intended transit stop(s) or destination and how the welfare of animals will be overseen; and
- e) euthanasia on board the aircraft if a competent stock handler is accompanying livestock, if livestock are accessible and if it is safe to do so, or as soon as possible after unloading from the aircraft; and
- f) procedures for the humane recapture of livestock that escape during the loading process.

### **Pregnancy testing and penning requirements for the export of juvenile alpaca**

#### **Summary of feedback:**

There was broad support for the proposed amendments with industry agreeing they provided a practical solution for juvenile alpacas with no negative impact on animal welfare. Some animal welfare organisations suggested that male and female alpacas should be separated from weaning, citing a 2003 research paper that states up to 10% of males may be fertile at 12 months of age.

#### **Department response:**

The proposed amendments have been finalised without further changes.

The department reviewed the 2003 research paper, and while it indicates spermatogenesis begins around 12 months of age, it states that males are incapable of breeding (extruding the penis) until around 15-18 months of age.

Industry best practice indicates immature male and female alpacas are routinely held together in the same paddock until 12 months of age, as the risk of aggression and/or dominance between animals socialised together is very low. IATA regulations also allow for the mixing of male and female alpaca. Scientific research and industry body, Alpaca Association Australia, identify that bodyweight is a useful metric to verify age for alpacas and can aid in the identification of animals that can travel safely together. Alpacas less than 35kg are classed as immature and incapable of breeding. Female alpacas typically reach sexual maturity between 12- 24 months of age (around 45-50kg bodyweight). Pregnancy ultrasound of immature alpacas will be of no benefit as they are classed as immature and unable to become pregnant.

The changes to standard 6.1.14 provide added flexibility around when juvenile alpaca *may* be penned together, (not *must* be penned together). The changes to standards 6.2.3 and 6.2.4 reflect scientific research regarding sexual maturity in alpacas. This indicates pregnancy ultrasound of immature alpacas will be of no benefit as they are classed as immature and are unable to become pregnant.

### **Amended standards for ASEL 3.3**

*(These versions of Standards 6.1.14, 6.2.3 and 6.2.4 come into force on 30 November 2023.)*

#### **6.1.14** When calculating pen space allocation and penning livestock:

- a) accurate final weights of livestock must be obtained in view of the weight limitations imposed by the load capabilities of the aircraft and the space required per animal; and
- b) where the number of animals per crate calculated is not a whole number, decimal point 4 and below must be rounded down. Decimal point 5 and above can be rounded up if the resulting space allocation does not exceed a 5% decrease from minimum requirements; and
- c) the livestock must be able to stand normally, and once lying down should be able to regain their feet unaided and without undue interference from other animals; and
- d) when livestock stand normally, no part of the animal's body (including horns) must touch any overhead part of the crate including any supporting crossbars; and
- e) expected ambient temperatures and ventilation capacity at loading, transits, transhipments and unloading must be taken into account; and
- f) livestock must be penned with animals of the same species, class, sex and of a similar weight with the exception of the following categories where animals may be penned together:
  - i) Females and castrated males, or
  - ii) Entire male and female alpacas if they have been socialised together in the source mob and they are less than 35kg at the time of loading for export from the approved premises or other premises used for export preparation; and
- g) where animals of unequal size are placed in the same crate, the crate must be divided so that they are penned separately; and
- h) where the total air export journey time scheduled is greater than 24 hours, the pen area per head must be increased by 10% (not cumulative with other requirements in Standards 6.2 to 6.10); and
- i) when livestock are loaded with mixed cargo in aircraft lower holds, the pen area must be increased by 10% (cumulative with other requirements in Standards 6.2 to 6.10).

### **Alpaca requirements**

**6.2.3** Female alpacas with a weight of 35kg or more sourced for export as feeder or slaughter animals must be individually pregnancy tested using ultrasound within 30 days prior to export, by a registered veterinarian with demonstrable current experience in camelid pregnancy diagnosis, who must certify in writing that the animal is not detectably pregnant. The certification must include the certifier's name, veterinary registration number, statement of experience, signature, the animal's identification and the date of the procedure.

**6.2.4** Female alpacas with a weight of 35 kg or more sourced for export as breeder animals must:

- a) be pregnancy tested using ultrasound foetal measurement by a registered veterinarian with demonstrable current experience in camelid pregnancy diagnosis; and

- b) be certified in writing by the testing veterinarian as either not detectably pregnant or pregnant and if pregnant include the number of days pregnant. The certification must include the certifier's name, veterinary registration number, statement of experience, signature, the individual identification number of the animal and the date of the procedure. Certification is valid for 60 days for not detectably pregnant alpaca, from the date of the procedure; and
- c) be not more than 227 days pregnant at the scheduled date of export, unless otherwise provided in a last third of pregnancy management plan approved in writing by the department.

## Other changes to ASEL 3.3: typographical errors, corrections to definitions, extension of a pen space table and standardising naming conventions

### Pen space allocation for goats

*(This version of Standard 6.7.9 comes into force on 30 November 2023.)*

**6.7.9** When calculating pen space allocation, the pen area per head must be increased by 10%

- a) for goats with more than 25mm of hair (not cumulative with b)); and
- b) for goats with horns in excess of Standard 6.7.7 d) (not cumulative with a)). These goats are to be penned separately.

#### Rationale:

This change corrects a typographical error and replaces (d) with (b).

### Linear interpolation

*(This version of the following definition comes into force on 30 November 2023.)*

**Linear interpolation** means a method of finding new values at positions between two data points.

The formula is:  $y = y_1 + ((x - x_1) * (y_2 - y_1)) / (x_2 - x_1)$ .

For the purposes of ASEL, this is where **x** is the **known value** (the animal's liveweight in kilograms - **Liveweight [kg]**), **y** is the **unknown value (Minimum pen area [m<sup>2</sup>/head])**, **x<sub>1</sub>** and **y<sub>1</sub>** are the liveweight and pen area **below** the known value in the ASEL table, and **x<sub>2</sub>** and **y<sub>2</sub>** are the liveweight and pen area **above** the known value in the ASEL table.

For example, to find the pen area for a **23kg** animal see below:

Liveweight (kg)	Minimum pen area (m <sup>2</sup> /head)
20	0.238
30	0.311

$$y = y_1 + ((x - x_1) * (y_2 - y_1)) / (x_2 - x_1)$$

- x is the known value (**23kgs**),
- y is the unknown value (i.e. the **Minimum pen area [m<sup>2</sup>/head]**)

- $x_1$  and  $y_1$  are the table values that are **below** the known value ( $x_1 = 20\text{kgs}$ ,  $y_1 = 0.238$ ) and,
- $x_2$  and  $y_2$  are the table values that are **above** the known value ( $x_2 = 30\text{kgs}$ ,  $y_2 = 0.311$ ).

$$\begin{aligned} \text{Minimum pen area (y)} &= 0.238 + ((23 - 20) * (0.311 - 0.238)) / (30 - 20) \\ &= 0.238 + (3 * 0.073) / 10 \\ &= 0.238 + 0.0219 \\ &= 0.259 \end{aligned}$$

Minimum pen area for a 23kg animal = 0.26m<sup>2</sup>

**Rationale:**  
The changes clarify the definition of linear interpolation and corrects an error in the formula for calculating minimum pen area.

### Aircraft crate pen area for alpacas

*(This version of Table 25 comes into force on 30 November 2023.)*

**Table 25 Minimum aircraft crate pen area for alpacas exported by air**

Liveweight (kg)	Minimum pen area (m <sup>2</sup> /head)
20	0.238
30	0.311
40	0.377
50	0.436
60	0.492
70	0.545
80	0.595
90	0.643
100	0.689
110	0.734
120	0.778

**Rationale:**  
The changes provide a greater weight range for minimum aircraft crate pen area for alpacas exported by air.

### Veterinary medicines and equipment

*(These versions of Tables 7 and 14 come into force on 30 November 2023.)*

**Table 7 Minimum veterinary medicines and equipment for buffalo**

Category	Medicines and equipment (per 1,000 buffalo)	Voyages of less than 10 days	Voyages of 10 days or more
Injectable antibiotics	<sup>1</sup> Penicillin (short acting)	15 buffalo doses	30 buffalo doses
	<sup>1</sup> Oxytetracycline (long acting) or equivalent	15 buffalo doses	30 buffalo doses
	<sup>1</sup> Antibiotic(s) appropriate for the treatment of bovine respiratory disease (may include Florfenicol, Tilmicosin, Tulathromycin, Tylosin)	15 buffalo doses	30 buffalo doses
Anti-inflammatory medicines	Dexamethasone	15 buffalo doses	30 buffalo doses
	Flunixin or equivalent	15 buffalo doses	30 buffalo doses
	Topical wound treatment	Sufficient to treat 10 minor wounds	Sufficient to treat 20 minor wounds
	Pink eye treatment	10 tubes	1 box of 20 tubes
Sedative	Xylazine	5 buffalo doses	10 buffalo doses
Other equipment	Thermometers	3 per vessel	3 per vessel
	Needles (18 gauge, 1 ½ inch) or equivalent	1 box of 100	1 box of 100
	Hypodermic syringes	40 x 20mL, 10 x 5mL	40 x 20mL, 10 x 5mL
	Restraint equipment	Adjustable head bale (1 per vessel) should be included	Adjustable head bale (1 per vessel) should be included
		Rope halter (1 per vessel)	Rope halter (1 per vessel)
		Nose grip pliers (1 pair per vessel)	Nose grip pliers (1 pair per vessel)
	Post-mortem kit	2 post-mortem knives plus steel and sharpening stone per vessel	2 post-mortem knives plus steel and sharpening stone per vessel
	Remotely triggered syringe device	1 syringe plus spare parts per vessel, plus 10 spare needles per 1,000 animals	1 syringe plus spare parts per vessel, plus 10 spare needles per 1,000 animals
Captive-bolt gun	1 per vessel, plus 40 cartridges per 1,000 animals	1 per vessel, plus 40 cartridges per 1,000 animals	

**Table 14 Minimum veterinary medicines and veterinary equipment for cattle**

Category	Medicines and equipment (per 1,000 cattle)	Voyages of less than 10 days	Voyages of 10 days or more
Injectable antibiotics	<sup>1</sup> Penicillin (short acting)	15 cattle doses	30 cattle doses
	<sup>1</sup> Oxytetracycline (long acting) or equivalent	15 cattle doses	30 cattle doses
	<sup>1</sup> Antibiotic(s) appropriate for the treatment of bovine respiratory disease (may include Florfenicol, Tilmicosin, Tulathromycin, Tylosin)	15 cattle doses	30 cattle doses

Category	Medicines and equipment (per 1,000 cattle)	Voyages of less than 10 days	Voyages of 10 days or more
Anti-inflammatory medicines	Dexamethasone	15 cattle doses	30 cattle doses
	Flunixin or equivalent	15 cattle doses	30 cattle doses
	Topical wound treatment	Sufficient to treat 10 minor wounds	Sufficient to treat 20 minor wounds
	Pink eye treatment	10 tubes	1 box of 20 tubes
Sedative	Xylazine	5 cattle doses	10 cattle doses
Other equipment	Thermometers	3 per vessel	3 per vessel
	Needles (18 gauge, 1 ½ inch) or equivalent	1 box of 100	1 box of 100
	Hypodermic syringes	40 x 20mL, 10 x 5mL	40 x 20mL, 10 x 5mL
	Restraint equipment	Adjustable head bale (1 per vessel) should be included	Adjustable head bale (1 per vessel) should be included
		Rope halter (1 per vessel)	Rope halter (1 per vessel)
		Nose grip pliers (1 pair per vessel)	Nose grip pliers (1 pair per vessel)
	Post-mortem kit	2 post-mortem knives plus steel and sharpening stone per vessel	2 post-mortem knives plus steel and sharpening stone per vessel
	Remotely triggered syringe device	1 syringe plus spare parts per vessel, plus 10 spare needles per 1,000 animals	1 syringe plus spare parts per vessel, plus 10 spare needles per 1,000 animals
Captive-bolt gun	1 per vessel, plus 40 cartridges per 1,000 animals	1 per vessel, plus 40 cartridges per 1,000 animals	

**Rationale:**

The changes standardise the naming of veterinary medicines and chemicals.

## More information

Learn more about the Australian standards for the Export of Livestock.

Web: [agriculture.gov.au/biosecurity-trade/export/controlled-goods/live-animals/livestock/australian-standards-livestock](http://agriculture.gov.au/biosecurity-trade/export/controlled-goods/live-animals/livestock/australian-standards-livestock)

Email: [ASELReview@aff.gov.au](mailto:ASELReview@aff.gov.au)

### Acknowledgement of Country

We acknowledge the Traditional Custodians of Australia and their continuing connection to land and sea, waters, environment and community. We pay our respects to the Traditional Custodians of the lands we live and work on, their culture, and their Elders past and present.

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