RSPCA
for all creatures great & small

19 September 2018

Mr Steve McCutcheon
Chair, Technical Advisory Committee
Review of the Australian Standards for the Export of Livestock

By email: TACsecretariat@agriculture.gov.au

Dear Mr McCutcheon

Comments on Stage 2 Issues Paper

Thank you for the opportunity to comment on the Stage 2 Issues Paper. This review provides a long overdue opportunity to shift Australia's standards for the export of livestock from a model based largely on mortality and survival-based measures to one that is focused on animal welfare outcomes utilising more sophisticated, science-based measures of welfare.

Please note that in the short time allocated for submissions we have not been able to cover all issues, nor have we been able to review all the available scientific evidence. We have instead focused on the key information available in the absence of the impending literature review and have provided attachments or links to where further information can be obtained.

We look forward to providing further detailed comment once the literature review has been published.

Yours sincerely

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RSPCA Australia submission

Stage 2: Issues Paper - Review of the Australian Standards for the Export of Livestock

2.2	What is the role for government?
	The Issues Paper makes reference to the recent Productivity Commission report on the regulation of agriculture and correctly identifies the role for government in responding to the inability of the market to provide acceptable states of animal welfare due to the conflict between welfare and profit-orientated goals within the live export trade. The Issues Paper also quotes the following passage from the Commission's report: "An important policy question is whether regulatory arrangements can effectively manage the welfare of Australian live exports without imposing costs that lead to a substitution to exports from other countries." However the Issues Paper leaves out the following paragraph in the Commission's report, which provides important context to the passage preceding it: "That said, if regulation is unable to effectively address the welfare risks for live exports (both during the voyage and in export supply chains), then the Australian Government could still decide to prohibit the trade on ethical grounds if this aligns with the expectations of the Australian community." We acknowledge that prohibiting the trade is not the current Government's policy nor is it within the ASEL review's Terms of Reference, but the objective of the current review is to improve the ASEL to deliver acceptable animal welfare outcomes that meet the Australian community's expectations and are based on scientific evidence. Considering whether such improvements may or may not lead to substitution to exports from other countries would place an artificial and inappropriate constraint on the deliberations and decisions of this review. The ASEL are our standards governing conduct within and connected to Australia. As a matter of policy, they should not be determined with reference to what other nations may or may not do. To do so would risk undermining our standards leading to a race to the bottom. The review of the ASEL must be considered based on achieving welfare outcomes acceptable to the Australian community and based on scientific evidence.
3.1	**Questions about reportable mortality rate**
	1) Should the current reportable mortality rates (RMR) be revised and, if so, how?
	Yes, the concept of RMRs should be completely revised.
	2) At what level of mortality should a notifiable incident be declared, thereby triggering an investigation?
	The aim of setting 'reportable' mortality rates should be to trigger the investigation of voyages that have unusually high levels of mortality. For reportable mortality rates to drive continuous improvement they need to be linked to actual rates: those consignments that report high rates compared to the majority of recent voyages should be investigated, rather than using a static level that does not change over time. In addition to investigating 'high' mortality voyages, all voyages should be subject to random audits of the Masters report, AAV/Stockperson reports and reports from Departmental Observers. This should include actions to confirm the accuracy of these reports and seek further clarification of those records where necessary.
	3) Should there be a relationship between the average mortality rate and the RMR and should it be reviewed annually?
	Yes, but review should be continuous not annual. Tracking of consignment mortality rates over time would enable the regulator to determine at what point an investigation should be considered.

	Mortality rates should be recorded and reported for all stages of the live export process covered by ASEL, from selection to discharge.
	4) What should be the stated purpose of an RMR, and what should be the consequence(s) of exceeding the RMR for a voyage?
	The current purpose of an RMR is to trigger an investigation. We propose a system where any voyage may be subject to random investigation, but all that exceed average mortality rates should be investigated. Investigations should aim to determine what factors may have led to the high mortality level and to recommend strategies to reduce the risk of these factors from reoccurring. Investigations should provide recommendations for future journeys (not just for that specific vessel or exporter) and for improvements to standards. These investigations should form part of a process of continuous improvement rather than just proposing changes to the next similar voyage. Investigations triggered by one consignment should automatically include all consignments on the voyage to allow comparisons between consignments. To ensure accurate record keeping, daily reports should be required for all journeys regardless of duration. Reports must be made available for R&D purposes so that good outcomes can be compared to poor outcomes. These reports need to be more comprehensive with information by pen and class of animal for all animals exported.
	5) Should the RMR also relate to classes of livestock (within species), different areas of the vessel etc. as well as length of journey?
	See above and below.
	6) Should the RMR be replaced by, or supplemented with, reportable levels for more general welfare indicators (e.g. see McCarthy Review report)? If so, what should the welfare indicators be and what should be the reportable level for each?
	See above and below.
3.2	**Questions about voyage reporting**
	1) What further changes, if any, do you think are necessary to the voyage reporting requirements of the standards?
	We support all the suggestions made by the 2012 ASEL review committee to expand the daily report and end of voyage report. Daily reports should be required for all voyages regardless of the length of the voyage. Reporting should be pen-specific and possible to relate directly to the vessel loading plan. Daily and end of voyage reports must clearly identify the number of animals euthanased (and the reason for euthanasia) and the number of animals that were found dead within the mortality reports. Reporting responsibilities should be the responsibility of an independent auditor (see comments in 8.1 below).
	2) Should the voyage reporting changes recommended by the McCarthy Review and then instituted by the Department be applied more broadly?
	Yes, daily reports of animal welfare indicators should be mandated in ASEL in addition to those already required following the McCarthy Review recommendation. We suggest that a reporting process using the welfare indicators identified in W.LIV.3032 be introduced. Reportable levels for individual indicators should be developed based on thresholds that represent good animal welfare, not on current outcomes which may be unacceptably poor. <u>Dairy heifers:</u> In addition to existing reporting obligations, all voyages on which dairy heifers are consigned should include additional daily and end-of-voyage reporting on the number of animals observed to suffer udder enlargement, the leakage of milk or clinical mastitis.(see W.LIV.0280)
	3) Some stakeholders would like voyage reports to be publicly available, while others argue that this approach may limit candour. What is the best approach to balance public transparency with frankness in reporting?

	All voyage reports should be publicly available (minus any personal information subject to privacy requirements). Transparency around voyage outcomes is crucial if the live export industry wishes to regain community support.
	4) Should there be on board real-time monitoring of animals and vessel conditions? If so, what should these be and what would be the cost?
	We support the installation and use of CCTV cameras on all vessels. CCTV should be observable from the bridge, kept for the entire voyage and the content made available to the regulator. Specific guidance should also be developed (and made public) for the video recording of voyages by Departmental Observers.
	5) Should there be specific recording and reporting of additional environmental parameters on vessels during voyages? What might these be, and can or should reportable 'trigger' levels be set?
	We support all the suggestions for environmental reporting made by the 2012 ASEL review committee. Trigger levels should be developed based on thresholds that represent good animal welfare, not on current outcomes which may be unacceptably poor. Temperature (dry and wet) and ammonia levels should be electronically data logged and fed to bridge, acted on/archived for further should use an investigation be required.
	6) Should there be specific recording and reporting of animal welfare indicators during, and at the conclusion of a voyage? If so, what might these welfare indicators be, how frequently should they be measured and can/should reportable trigger levels for these measures be established?
	We suggest that a reporting process using the welfare indicators identified in W.LIV.3032 be introduced and support those already recommended by the McCarthy Review. Reportable levels for individual indicators should be developed based on thresholds that represent good animal welfare, not on current outcomes which may be unacceptably poor.
	7) If reporting requirements are increased, what might be this cost and who would pay?
	The RSPCA does not have access to information that would provide an answer to the question of cost, however, commercial imperatives should not be allowed to override animal welfare imperatives. The cost of any additional reporting requirements should be borne by the exporter.
4.1	**Questions about limits relating to heat stress risk assessment application**
	The definition of 'Heat stress risk assessment (HSRA)' in the reformatted ASEL should be amended following the outcome of the Heat Stress Risk Assessment review to ensure that it includes reference to the change in risk settings. The change in risk settings from mortality to animal welfare measures is a fundamental change in the regulatory parameters of the trade. The new settings should therefore be explicitly referred to in the ASEL as opposed to simply leaving them open to the Department of the day to approve.
	1) Should paragraph 3A.4 (a) (ii) be amended to include other geographical locations?
	Yes, this clause should cover all exports into climatic conditions where there is any risk of heat stress. For example, heat stress is major problem for slaughter weight *Bos taurus* cattle from Southern Australia to China over the equator, especially during monsoon period – see recent reportable mortality events on the *MV Dareen* and *MV Yangtzee Harmony*.
	2) Is the restrictive period of May to October for voyages departing to the Middle East appropriate? Are these the high risk months for heat stress for animals being exported to the Middle East? If not, what months should be considered as high risk?
	The aim of this clause should be to require risk mitigation measures are in place to avoid heat stress, not just during very high risk months, but during all months where heat stress is a risk. While the frequency of very high mortality voyages is has been highest in August, the risk is high throughout the May-October period and as global average temperatures rise this period is likely to expand. When it comes to restrictions on the export of sheep on journeys to the Middle East during May-October, the evidence is clear that regardless of any proposed changes the standards, sheep will suffer heat stress during voyages to the Middle East in the May-October period. This is reflected in the conclusion of the AVA submission to the McCarthy Review 2018: "*Thermoregulatory physiology*

	indicates that sheep on live export voyages to the Middle East during May to October will remain susceptible to heat stress and die due to the expected extreme climatic conditions during this time. Accordingly, voyages carrying live sheep to the Middle East during May to October cannot be recommended."
	3) Are there different high risk months for different markets that aren't considered in the standards?
	See above - this clause should cover all exports into climatic conditions where there is any risk of heat stress.
5.1	**Questions about sourcing *Bos taurus* cattle**
	1) Should Paragraph 1A 3.2 (c) (iii) be retained in its current form? Bos taurus *from an area of Australia south of latitude 26° south must not be sourced for export to the Middle East from May to October unless an agreed livestock heat stress risk assessment indicates the risk is manageable as per the testing criteria specified in this Standard.*
	Yes, this paragraph should be maintained, but not in its current form. The exemption for variation under the heat stress model must be removed. Application of the model does not adequately remove the risk to these animals (see Summary of DAFF Mortality Investigation Reports (Consignment 39) and LIVE.204). Cattle need to be tolerant to and acclimatised to hot weather conditions if travelling to a zone of high temperatures and/or humidity. Best animal welfare practice would be for no *Bos Taurus* cattle to be sourced during May-October regardless of the location of breeding (see SMBR.003) In addition, the clause should be strengthened to specifically exclude the export of pregnant dairy cattle – this class of animal must not be shipped into the Northern hemisphere from anywhere in Australia during May to October (see LIVE.208).
	2) Should Paragraph 1A 3.2 (c) (iv) be retained in its current form? Bos taurus *cattle with a body condition score of five (5) or more must not be sourced for export from or through any area north of latitude 26° south from 1 October to 31 December (inclusive).*
	Yes, this paragraph should be maintained, but amended to accommodate the following points. Animals with fat cover of 20 mm at the P8 site should not be selected for export (see SMBR.003). This equates to a body condition score of 4.5 or over. Cross-bred cattle – clause should include cross-breeds with more that 50% *Bos taurus*. Appendix B5 should be updated to provide body condition score diagrams equivalent to the standard shown for buffalo for all species.
5.2	**Questions about shearing livestock with wool, fibre or hair**
	1) Should there be a minimum period of time off-shears and/or wool length to apply for all wool sheep being sourced for export?
	Yes. The principle of a minimum time off-shears for all sheep was AGREED by the 2012 ASEL review committee. The standard currently has two conflicting clauses. It allows sheep to be loaded for export immediately off-shears if they are held in sheds in the feedlot, but requires them to be at least 10 days off shears if they were shorn elsewhere. Allowing sheep immediately off-shears to be loaded does not take into account the cumulative stress of shearing plus transport. Recently shorn sheep are at increased risk of stress and mortality during export due to the additional impost of drafting and handling around shearing. There is also increased risk of infection due to shearing cuts. No sheep should be moved from the farm or registered premises without a period of recovery off shears and after all shearing cuts have healed. All open wounds must be dried up prior to loading. The principle of a fixed time off-shears for all sheep was AGREED by the 2012 ASEL review committee. There is an error in the discussion paper in this regard as it gives the impression that the committee agreed to reduce the time off-shears. This is incorrect; there was no suggestion of removing the requirement for 10 days off-shears for sheep shorn on farm, the options were about introducing a time off-shears for sheep shorn at the RP:

	S1.16 Sheep, goats and alpacas must only be sourced for export if they: a) have wool not more than 25 mm in length ***Option 1 – DAFF discretion for hair length*** b) *have hair not more than 25 mm in length, unless approved by DAFF based on a heat risk assessment model agreed by DAFF and at least an additional 10 percent space provided.* ***Option 2- No DAFF discretion for hair length*** *b) have hair not more than 25 mm in length.* c) are 10 days or more off shears; or ***Option 2 – two days off shears*** *d) are to be shorn at least two days (not including the day of shearing and loading) before export, in which case they must be accommodated in sheds on the registered premises.* ***Option 3 – three days off shears*** *d) are to be shorn at least three days (not including the day of shearing and the day of loading) before export, in which case they must be accommodated in sheds on the registered premises.* An upper limit on time-off-shears is also advisable and matches the recommendation on the McCarthy report. Sheep should be shorn close to the time of export (allowing for a recovery period as outlined above) to reduce the risk of heat stress, the incidence of contamination of sheep with a faecal 'jacket' and the related discolouration of the sheep fleece (see W.LIV.0254 and Consignment reports 15,16) Record keeping must include dates and details of shearing.
	2) Should all hair sheep and alpacas be subject to the same requirements as wool sheep?
	Yes. The 25mm limit should be applied to all sheep regardless of whether they are classed as wool or hair sheep: allowing the export of long-wool or hair sheep is an unacceptable risk (see W.LIV.0254)
	3) Should the standards be amended to alter the specifications currently in place prescribing time-off periods for shorn wool sheep and shorn hair sheep? If so, what would you suggest?
	Yes, see above comments.
	4) Are any other changes necessary to the requirements for wool sheep and hair sheep?
	Yes, see above comments.
	5) Should the current standards regarding timing of shearing prior to loading for export by sea be revised?
	Yes, see above comments. The Issues Paper should be amended to ensure that it does not misrepresent the options presented by the 2012 ASEL review committee. The principle of a fixed time off-shears for all sheep was AGREED by as outlined above.
5.3	**Questions about maximum weight for cattle and buffalo to be exported by sea**
	1) Should the maximum weight for sourcing and exporting cattle and buffalo be the same?
	Yes, unless there is evidence to indicate that the maximum weight for buffalo should be reduced further.
	2) Should cattle and buffalo exported for feeder and slaughter purposes have a different maximum weight to cattle and buffalo exported for breeder purposes?
	Why would they? The purpose of export is unknown to the exported animal. Differences in treatment should relate to the class and specific needs of the exported animal, not to the purpose of export.
	3) Is 500 kg appropriate? Is 650 kg? Should it be higher/lower and why? What are the animal health and welfare risks? Are there any mitigating measures that must be taken?

	As the mature weight of adult cattle increases, their agility declines and there is an increase in the probability of physical injury. Over-fat animals are more susceptible to heat stress and less athletic than lean animals of the same body weight. This is an accepted principle in the industry (SMBR.003). There is no justification for exporting heavy and fat cattle other than commercial pressures. To avoid the high risk of musculoskeletal injury and increased mortality, the upper weight limit for all cattle should be set at 500 kg. No exemptions should be made as these animals are too high risk to export.
	4) Is a weight restriction appropriate and are there extra conditions that should apply or should it be more specific, for instance, a body condition score and breed?
	Yes, a weight restriction is appropriate.
5.4	**Questions about minimum hold times in registered premises**
	1) What is the minimum time that sheep and goats should be held in an outdoors registered premises prior to loading aboard an export vessel? Should other provisions be included regarding seasonal factors, feeding and pre-conditioning to shipboard rations?
	The time sheep spend in paddock-based feedlots should be considered in terms of an appropriate balance between the need for time to acclimatise to a pelleted diet and the increased risk of feedlot-related salmonellosis as sheep remain in paddocks. Commercial pressure to reduce the time spend in feedlots should not override animal welfare factors. Research conducted to date does not appear to support a reduction in current requirements for time spent in paddock feedlots, but a number of other recommendations have been made around the way in which sheep are selected and prepared for export (see LIVE.123): • minimising salmonella challenge at the assembly depots (through improved feed design to minimise faecal contamination) • promoting consistent industry adoption of the road transport guidelines (e.g. requiring Truckcare accreditation) • avoid sourcing sheep from high risk locations pending clarification and correction of the risk posed to these sheep • ending the practice of 'topping up' consignments by sourcing sheep from saleyards • implementation of a uniform information management system across industry to track sheep performance from origin to discharge. • improve the training and definition of responsibilities for shipboard veterinarians and stockmen Sheep in paddocks are in some cases provided with hay as supplement to pellets where shy feeding is an issue (against the current standard). This means that they may maintain condition and thus be passed as fit for export, only to end up on the vessel without having switched to the pelleted diet. This needs to be resolved to that shy feeders more likely be picked up prior to export, as soon as they lose condition, and are excluded from export.
	The standard should be amended to exclude the selection of goats for export. No goats have been exported by sea in the past 3 years and prior to that annual exports by sea were less than 1000 head. Previous extreme mortality events have indicated that goats do not cope well with the sea voyage and R&D reports have recommended that feral goats should not be selected for export by sea (LIVE.215). In December 2007, following a number of reportable mortality incidents on long haul shipments of goats by sea, AQIS restricted the shipment of goats to voyage lengths of less than 10 days. The move to air transport for goats is clearly cost-effective (13,694 goats we exported by air in 2017).
	2) What is the minimum time that sheep and goats should be held in sheds registered premises prior to loading? Should other requirements be made for seasonal factors, feeding and pre-conditioning to shipboard rations?
	See above comments regarding the improved selection and preparation of sheep. The risk of feedlot-related salmonellosis is lower than for paddock-held sheep. Industry research has found that sheep assembled for 7-8 days had a lower risk of mortality than those assembled for 3-6

	days (see LIVE.123 p96). On this basis, we support an increase in the minimum time sheep spend in sheds from 5 days to 7 days.
	3) Should the standards be amended to alter the specifications currently in place prescribing timelines for various classes of livestock to remain at a registered premises prior to export by sea? If so, what would you suggest?
	Mortality investigations have found that movement of cattle between registered premises and reduced time in holding have contributed to onboard mortalities in multiple cases (Consignment 3,5,10,11,12,13,14,35). These investigation reports have all recommended a minimum of 3 clear days at registered premises for cattle and buffalo. This should apply to all short-haul and long-haul journeys where the current standard is one or two clear days.
	4) What would be the cost implications of any changes to the times livestock must spend in registered premises?
	The RSPCA does not have access to information that would provide an answer to this question, however, commercial imperatives should not be allowed to override animal welfare imperatives.
5.5	**Questions about the management of shy feeders and inanition in sheep**
	1) What measures should be required to reduce the incidence of inanition and salmonellosis in sheep? Are the current requirements in the standards adequate to manage shy feeders and inanition in sheep?
	No, current requirements are not adequate. Salmonella induced enteritis, inanition, or a combination of both, remain the cause of the majority of sheep mortalities during export. Yet despite considerable investment in research into this issue, very little progress has been made in terms of prevention. This is partly because risk factors for salmonellosis are multi-factorial, but also because the industry has failed to implement most of the recommendations produced through this research.
	2) If not, what changes would you suggest?
	Risk factors for sheep deaths in relation to on-farm selection and preparation have been known for many years and include geographical location, length of pasture and rainfall at farm of origin, mixing of sheep, previous dietary experience, handling facilities and procedures (Alliance Consulting 2001). The major cause of death during sheep voyages is salmonella/inanition and affected sheep are also at a higher risk of heat stress. Significant investment has been made in researching the feeding behaviour and intake of sheep during preparation in an effort to address inanition. This indicates that after 5 days of exposure to pelleted diet only 95% of sheep are eating adequately. Yet, to date, this has failed to lead to any significant changes in sheep selection or management. Inanition is also exacerbated by high stocking densities and limited access to feed troughs. It is not possible to exclude all sheep at risk of inanition prior to export, so the focus must be on reducing the likelihood of inanition from occurring. This means better backgrounding of all sheep including on-farm preparation. This is incompatible with 'topping up' up with saleyard sheep to fill orders with no knowledge of their history or their risk. R&D reports have identified a number of criteria which could be applied to reduce the risk of mortality, including implementing a uniform information management system to track sheep performance (LIVE.123). Consideration must be given to a system of compulsory feedback to ensure that individual animals can be tracked and monitored and how high risk animals can be excluded from selection (LIVE.216). Most recently, Barnes et al. 2018 stated that the primary method of identifying and handling shy feeders remains the use of experienced stockmen. Despite decades of research on this topic, no other practical way has been proposed to accurately identify shy feeders. While live sheep exports continue, standards must ensure that all sheep selected for live export are adequately backgrounded prior to leaving the farm. Saleyard sheep must be excluded from all consignments. Emphasis must be put on improving the training of stockmen and daily observation of

	sheep to identify and remove shy feeders. Shed design must facilitate removal without requiring entire mobs to be drafted.
	3) What would be the cost implications of any proposed changes to these requirements?
	The RSPCA does not have access to information that would provide an answer to this question, however, commercial imperatives should not be allowed to override animal welfare imperatives.
5.6	**Questions relating to pregnancy requirements**
	1) What is the risk of changing the pregnancy test requirement from all Damara sheep to only those that weigh over 40 kg?
	There is evidence that Damara sheep can conceive at 30kg so there is a risk of exporting untested pregnant sheep if this were to change.
	2) Should the standards be expanded to include all fat-tailed sheep and not just Damara? Fat-tail sheep being: sheep distinguished by a genetic predisposition for the accumulation of fat in the tail and hindquarters.
	Yes
	3) Must pregnancy testing be undertaken by a veterinarian, or is a competent pregnancy tester acceptable? Should it be expanded to any livestock pregnancy tester as accredited by the state or territory?
	Yes. It is crucial for the welfare of exported females that all pregnancy testing is as accurate as possible. To ensure an acceptable level of accuracy, pregnancy testing must only be undertaken by a registered veterinarian with demonstrable current experience in pregnancy diagnosis for the given species, with the following exceptions: In the case of sheep, an accredited tester with demonstrable current experience in sheep pregnancy diagnosis may be used, provided all sheep are individually identified and the pregnancy status is linked to the RFID number). In the case of breeder cattle, these should only be tested by a registered vet accredited under the National Cattle Pregnancy Diagnosis Scheme. In addition, the standards must ensure that animals in their third trimester are NOT exported (for cattle, gestation is 279-283 days, last trimester starts at 186 days; for buffalo, gestation is 310 days, last trimester starts at 207 days; sheep gestation is 148-152 days, last trimester starts at 99 days). LIVE.208 recommends limit to pregnancy for cattle of 180 days. We recommend a requirement that animals be certified in writing as no more than a maximum of 180 days pregnant for cattle and 200 days pregnant for buffalo at the scheduled date of departure. Current standard for breeder sheep (no more than a maximum of 100 days pregnant at the scheduled date of departure) should be changed to 99 days.
	4) Should the 30 day period prior to export for pregnancy testing be extended to 45 days as a blanket change? Should there be discretionary allowances for low-risk cases, such as unjoined heifers or a shipping delay, where adverse animal welfare outcomes are likely to result from re-testing.
	We would support some flexibility in dates where shipments are delayed and there is a valid animal welfare reason to avoid re-testing. However this should not be considered as a blanket change but as a case-by-case discretionary clause, provided that the standards ensure that non-pregnancy status is maintained. This should only be considered in cases where animals have been pregnancy tested by an accredited vet, are individually identified and their RFID code is linked with the record of their pregnancy status.
	5) Should the age that goat kids and ewe lambs are pregnancy tested be increased to more than five months? What would be an appropriate age for goat kids and ewe lambs to be tested?
	No. Sheep and goats can conceive from 150 days of age.

	6) Are the methods for carrying out pregnancy tests appropriate? Are there any appropriate national pregnancy testing criteria currently in place that should be adopted/referred to in the standards?
	Submissions to the 2012 ASEL review indicated that ASEL pregnancy testing requirements are inadequate. Criteria for determining pregnancy need to be more stringently defined. The same standard should apply whether the test is to determine the length of pregnancy or to determine that the animal is not pregnant (i.e. the same standard for export for breeding and feeder/slaughter animals). Animals spayed using the Willis technique should be subject to the same conditions as those spayed traditionally. Requirements for competency of pregnancy testing must be consistent and of the highest standard (this is not a straightforward or precise test). Individual identification of ALL animals is necessary to verify that the animal that had a negative pregnancy test is the animal being exported. Submissions to the 2012 ASEL review indicated that where livestock that are prepared for export are pregnancy tested but are not individually identified it is impossible for the certifying officer to confirm the status of the animals presented. All documentation relating to pregnancy status must identify individual RFID codes.
	7) Should breeder cattle and buffalo only be determined as too small to be manually palpated safely by a veterinarian accredited under the National Cattle Pregnancy Diagnosis Scheme (NCPD) or should this be any veterinarian?
	No change should be made to this standard. Testing should be via ultrasound by an accredited vet certified for ultrasound pregnancy testing.
	8) What would be the cost implications for any proposed changes to these requirements?
	The RSPCA does not have access to information that would provide an answer to this question, however, commercial imperatives should not be allowed to override animal welfare imperatives.
6.1	**Questions about stocking density**
	1) Do you agree with the application of an allometric model for densities? What is the appropriate k value and why? Should the k coefficient value vary depending on the species and voyage length?
	Yes, we support the use of allometric stocking densities for all species. However, the k-value assigned should not just be sufficient to avoid consistent harm: they must be sufficient for all animals to be lying down at the same time, for all animals to easily access food and water providers, for the identification of shy feeders and for visual inspection of all animals. This is consistent with OIE requirements which state: ***7.2.5. Planning the journey*** *7. Space allowance* *b) Each animal should be able to assume its natural position for transport … When animals lie down, there should be enough space for every animal to adopt a normal lying posture.* ***7.2.9. Travel*** *1. General considerations* *d) Adequate access to suitable feed and water should be ensured for all animals in each pen.* Using allometric principles, this requires a k-value of 0.047. This allowance is irrespective of the risk of heat stress and should apply as the basic minimum all year round for all species. An additional 15% space to this is required for pregnant animals and other vulnerable animals. In order to ensure stocking densities are not exceeded and that all rejected animals are recorded, the standards should require cross-checks between transport loading records from the registered premises and the loading records onboard the vessel. Please see attached RSPCA Comments 2013 Discussion Paper on Stocking Densities for more information on this topic.
	2) Should the McCarthy Review application of a k coefficient of 0.033 be applied more broadly?

	We support the application of allometric stocking densities for all species on all voyages, but at a k value of 0.047 for the reasons explained above.
	3) How would you standardise liveweights? Is it appropriate to apply a factor associated with curfew and anticipated weight during the voyage? How else can curfew and weight gains after leaving the registered premises be accounted for?
	Yes, it is appropriate to apply a factor associated with curfew and anticipated weight during the voyage. We support the Department's approach to this issue following the McCarthy Review.
	4) What is the financial impact of changing on board stocking densities?
	The RSPCA does not have access to information that would provide an answer to this question, however, commercial imperatives should not be allowed to override animal welfare imperatives.
6.2	**Registered premises stocking density**
	1) Are stocking densities at registered premises an issue?
	Yes. Space allowance in RPs should exceed that recommended on-board vessels with a k value of 0.047. Stocking densities for sheep held in sheds in registered premises are based on an average individual liveweight of 54kg (Reformatted ASEL - Appendix C). ASEL does not set a minimum stocking density for sheep held in paddocks. Pen densities vary according to whether sheep are penned in small (<8 animals) or large (>31 animals) groups and whether they will be held for 10 days or more. Most (if not all) sheep held in sheds in registered premises for export by sea are held in large groups. The current requirements for sheep penned in groups of more than 31 animals are 0.33m^2 for less than 10 days and 0.5m^2 for more than 10 days. This is well below the allometric requirement (when k=0.047) of 0.654m^2. Separate stocking densities should be provided for beef and dairy cattle (see LIVE.208). Trough space is also an issue and can also be calculated from allometric principles. Petherick & Phillip (2009) state that the minimum length of trough per head to allow animals to feed or drink, assuming no competition, is described by: Length (m) = 0.064 x $W^{0.33}$ In reality, competition exists and is a known problem for sheep onboard ship. To overcome this Broom and Fraser (2007) suggest the equation: Length (m) = 0.112 x $W^{0.33}$ Broom, D.M., Fraser, A.F., 2007. Domestic Animal Behaviour and Welfare. CAB International, Wallingford, pp. 180–207. Petherick, J.C. & Phillips, C.J.C. (2009) Space allowances for confined livestock and their determination from allometric principles, Applied Animal Behaviour Science, 117: 1-12.
	2) What do you think about the options presented in the 2012-13 review? Should any of those options now be implemented?
	We support the option presented in the 2012-13 review to require the same space allowance for sheep held in RPs regardless of the time they are held for. We question whether the stocking densities for more than 10 days have been complied with in the past when loading delays have required sheep to be held longer than originally planned. In addition, sheds in RPs must allow for the inspection of individual animals and the removal of animals that become ill, injured or otherwise unfit for export to be removed and treated and/or transferred to a hospital paddock as soon as they are identified. This means setting a maximum group size for pens and paddocks and providing laneways to enable animals to be removed from the group without having to move them through other pens or paddocks. Mesh flooring in sheds must allow sheep to lie down and get up comfortably. Registered premises must be suitable for the purpose at all times of year and in all climatic conditions

	We support a space allowance for cattle and buffalo of $9m^2$ regardless of the time they are held in the RP. This would bring ASEL in line with national feedlot standards.
	3) What are the cost implications of changing stocking densities in registered premises?
	The RSPCA does not have access to information that would provide an answer to this question, however, commercial imperatives should not be allowed to override animal welfare imperatives.
7.1	**Bedding and ammonia level questions**
	1) What specific requirements (i.e. volume, usage, and components) should exist for bedding material for export consignments of cattle and sheep? Should these apply to all voyages or only some? Should it apply to all species or only some?
	Review bedding requirements for cattle (see W.LIVE.0254) Specific requirements are needed for dairy cattle (See LIVE.208)
	2) Should the standards be amended to alter the specifications currently in place to manage provision of bedding for livestock and ammonia levels on vessels? If so, what would you suggest?
	Bedding – we support Option 3 in *Appendix 4.3 Provision of bedding* in the 2013 Draft AAWSEL
	Ammonia - A number of research reports have made recommendations about the need for a maximum level of ammonia that should trigger corrective action on board ship. Industry research has recommended a standard should be developed requiring the regular monitoring of ammonia and requirement for corrective action at 25ppm (LIVE.218). We support the inclusion of a standard that ammonia levels not exceed 25ppm.
	3) Should there be a requirement that bedding is used to manage an appropriate faecal pad? Should a statutory reserve amount of bedding be required as a contingency amount to manage any flooded pens?
	Yes and Yes.
	4) What would be the costs of any changes to the current arrangements?
	The RSPCA does not have access to information that would provide an answer to this question, however, commercial imperatives should not be allowed to override animal welfare imperatives.
7.2	**Water, fodder and chaff requirements on vessels questions**
	1) Should paragraph 3A.3.2 (c) be amended as follows: **a) 'For all long-haul and extended long-haul cattle voyages, at least 1 per cent of the fodder required for cattle must be chaff and/or hay.'**
	Yes, this was proposed on the 2013 Draft AAWSEL.
	2) There are a range of issues relating to shipboard fodder requirements being reviewed within Industry. In the interim, are there any other changes to water, fodder and chaff requirements that need to be addressed?
	Chaff should be provided on board all vessels as mitigation for shy feeders, scouring cattle, bloat and to entice shy feeders onto pellets.
	3) Should automated water systems be mandatory on all voyages? What would be the cost associated with this change and who should pay?
	It is absolutely imperative that automated water systems are mandatory on all vessels. Water should be provided ad lib and available to all animals as soon as they are loaded onto the vessel. Curfewing water is NEVER acceptable. There is no reason or scope for curfewing animals from feed during discharge due to the unreliable timing of truck arrivals and discharge sequence changes.
	4) Should there be extra fodder provisions for voyages longer than 10 days?

	Yes. The risk of delay and therefore running out of fodder is too great. Rationing of fodder during the voyage increases bullying, shy feeders, illness and poor welfare. All voyages should have ad-lib feeding.
8.1	**On board personnel and the monitoring and management of animals questions**
	1) In addition to the ship's crew, which on board personnel should accompany livestock export consignments? Should this apply to all consignments? Please provide detail.
	Every live export voyage should be required to have an appropriate number of veterinarians, stockpersons and veterinary equipment to properly manage, care for, and treat every animal on board. This staffing level should reflect the need for sheep to be considered and treated as individuals (not as a group) in the same way as cattle in order to meet ASEL requirements. To overcome the inherent conflict of the current system, in addition to the vet and stockpersons, each vessel must also carry an independent auditor with appropriate animal welfare and auditing skills, to monitor and assess the welfare of animals and compliance with ASEL during the voyage. This person should be a vet or an otherwise qualified animal scientist with competencies in assessing animal welfare and auditing. The independent auditor would undertake reporting requirements to the Department with the assistance of the accredited stock-persons and AAVs. Ultimate responsibility for daily reports, notifiable incidents, and end of voyage reports should rest with the independent auditor. When it comes to monitoring the day-to-day outcomes during the voyage, DAWR must ensure that staff involved in receiving daily and end-of-voyage reports have the skills to be able to review these reports and act on information in them. In order to do this, it is advised that such staff have travelled on a vessel and have received appropriate training.
	2) Should the current requirements in the standards be amended and, if so, what elements should be changed?
	Yes. We support the proposal in the 2012 ASEL review to relate the number of accredited stockpersons to the number of animals loaded. The ASEL should require at least one accredited stockperson per 2,500 head of cattle and 10,000 head of sheep. We support the 2012 ASEL review option to require an AAV to accompany all live export consignments. The appointment of AAVs should be made by the regulator to avoid any conflict of interest. All live export consignments should require an independent auditor with ultimate responsibility for reporting requirements.
	3) What is your view of the three options for AAVs accompanying voyages proposed during the 2012-13 review, and why?
	We support the 2012 ASEL review option to require an AAV to accompany all live export consignments. Only AAVs are trained to actually diagnose a range of disease and prescribe appropriate treatment. There is always a risk that stockpersons may misdiagnose conditions and use inappropriate treatment.
	4) Does the requirement for Independent Observers now in place modify or change the need for AAVs to accompany some or all voyages?
	No. All voyages must include an independent auditor with competencies in animal welfare and auditing in addition to the existing AAV. The independent auditor must be selected and paid by the regulator (either directly or via a suitably qualified and independent third party arrangement).
	5) What do you believe the roles and responsibilities of the following personnel should be, and why?
	We support the adoption of the descriptions outlined in *Appendix A.1 Roles, responsibilities and competencies of livestock export supply chain operators* presented on pages 11-17 of the Draft AAWSEL which came out of the 2012 ASEL review process with the following amendments/additional comments.
	a) AAVs

	As per draft AAWSEL Appendix A.1 but with appropriate amendment of reporting responsibilities to reflect comments to question 1 above i.e. 'assisting the Independent Auditor with reporting responsibilities to the Australian Government.' All existing AAVs should be required to undergo training to familiarise them with any changes to existing standards. Steps should also be taken to ensure that all new veterinarians are accompanied by an existing AAV when undertaking their first voyage.
	b) Stockpersons
	As per draft AAWSEL Appendix A.1 but with appropriate amendment of reporting responsibilities to reflect comments to question 1 above i.e. 'assisting the Independent Auditor with reporting responsibilities to the Australian Government.' All existing Stockpersons should be required to undergo training to familiarise them with any changes to existing standards.
	6) If AAVs are to be placed on more or all voyages, what is the additional cost and who should pay?
	The cost should be borne by the exporter.
	7) Is it a practical requirement for stock handlers on board to be able to observe all animals at all times during a voyage? If not, what requirement should exist to ensure animal health and welfare is appropriately monitored during a voyage?
	Yes, it should be possible for stockpersons to be able to observe all animals at any time during a voyage. This requires sufficient levels of staffing, ensuring access to all decks and pens at all times, as well as ensuring that pen design and stocking density allows for easy individual inspection of all animals.
8.2	**Vulnerable/special classes of animals questions**
	1) Are there specific requirements that need to be in place for vulnerable or special classes of livestock, which are currently not addressed in the ASEL? Which categories of stock and what additional requirements are needed? Could these be managed under specific management plans, or departmental discretions?
	All sheep must be individually identified and traced through electronic tagging to ensure that numbers of sheep loaded and unloaded are accurate. This is essential to ensure compliance with standards relating to stocking density, mortality, health and welfare monitoring (and will facilitate traceability and compliance within ESCAS). A number of the issues raised in the paper can only be dealt with if sheep are individually identified. Special requirements are needed for the export of entire males. Entire males, especially goats and dairy bulls, are at higher risk of mortality, poor welfare and management problems than other classes of livestock. An investigation of the aggressive behaviour of entire males (LIVE.121 made a series of specific recommendations for the selection, segregation and inspection of entire males across all species. These recommendations should be incorporated in to all relevant standards.
	2) Should the requirements in the standards be amended to address concerns raised about safeguards for vulnerable/special classes of animals? If so, what changes should be made?
	Yes. Feral animals of any species must not be sourced for export. They experience immense stress during loading and during voyage and have a history of high mortality rates. They also pose great risk to personnel trying to load, tend, treat or discharge them.

Minor amendments

9.1	**Exclusion of deer and camelids**
	ASEL Review Technical Advisory Committee interim recommendation:
	1) Removal of the requirements relevant to exporting deer and camelids by sea, to be replaced by the provision of consignment specific management plans. These plans will initially cover the requirements contained within ASEL but will be required to be customised to address specialised animal health and welfare requirements for these high-risk consignments.
	a) Specific comments made by Deer Industry Association of Australia will be considered for updating the minimum requirements for deer consignments.
	We support the removal of deer, camelids and goats from ASEL provided the standards are adjusted to prevent the export of these species by sea. They experience immense stress during loading and during voyage and have a history of high mortality rates. They also pose great risk to personnel trying to load, tend, treat or discharge them. Vessels and stockpersons are not equipped or trained to handle these animals, there are no ESCAS supply chains set up or approved for them, and no commercial imperative to export these species by sea.
9.2	**Updating definitions and body condition scoring**
	ASEL Review Technical Advisory Committee interim recommendation:
	2) Definitions for 'pastoral' and 'station' sheep to be included as agreed in 2012-13 and in Appendix A of this issues paper.
	Support
	3) Updated and industry standard body scores to be included as agreed in 2012-13, as proposed by the Australian Buffalo Industry Council, and as detailed in Appendix B of this issues paper.
	Support.
	4) Terms to be quantified through drafting the standards text to remove legal uncertainty of certain standards. Definitions list to be thoroughly reviewed, considering the Australian Animal Welfare Standards and Guidelines definitions.
	Support
9.3	**On board veterinary medicines and equipment**
	ASEL Review Technical Advisory Committee interim recommendation:
	5) Amend ASEL to reflect that Appendix F Table #10 applies to all classes of cattle and buffalo exported by sea, not only slaughter and feeder classes.
	Support, but noting that the Table should be updated with the following addition recommended in the 2013 Draft AWSEL (p58) for breeder cattle added: *Additional requirements for pregnant cattle:* o *5Lt of Obstetrical Lubricant per 2000 dairy cattle* o *Calving ropes (1 set per ship)* o *Obstetrical gloves (1 box per ship)* o *Oxytocin (50ml per 1000 cattle)* o *Additional Chlorhexidine (or equivalent) 5Lt per ship* o *1Lt iodine per ship (umbilical cleaning)* o *Uterine Pessaries,(10 per 2000 cattle)* o *Surgical equipment adequate to conduct a caesarean section.*

	Additional drugs and equipment may be necessary if there are other classes of cattle or buffalo in the consignment (e.g. mastitis treatment and obstetrical supplies for pregnant cows, scour treatments for calves) or as indicated by the performance of the consignment during preparation. AGAV may request additional/specific supplies as required
	6) Appendix F—Mandatory veterinary medicines and equipment—is updated:
	a) Upon completion of research by Livecorp into Shipboard drug use
	b) In consultation with experienced shipboard AAVs
	c) With consideration to the causes of poor welfare outcomes and mortalities upon review of consignments
	Before conducting further research, the current review should ensure that recommendations made during previous reviews of on board veterinary medicines and equipment have been implemented. See the 2013 Draft AWSEL, section 4.1.9, specific reviews conducted on behalf of Livecorp in 2010 by Ross Ainsworth, Lyn Simpson and Michael McCarthy and MLA survey 2009 B.LIV.0245. Further reviews of this equipment list should include a process of independent scientific peer review.
	7) Divided into minimum requirements for the voyage and minimum doses per quantity and class of animals.
	Support.
9.4	**Minimum liveweights for export**
	ASEL Review Technical Advisory Committee interim recommendation:
	8) Amend 1A.3.4(d)(i) to increase the minimum liveweight of sheep for export by sea from 28 kg to 32 kg
	Support.
	9) Amend 1A.3.4(e)(i) to increase the minimum liveweight of goats for export by sea from 22 kg to 24 kg
	RSPCA Australia does not support the export of goats by sea. In December 2007, following a number of reportable mortality incidents on long haul shipments of goats by sea, AQIS restricted the shipment of goats to voyage lengths of less than 10 days. No goats have been exported by sea in the past 3 years and prior to that annual exports by sea were less than 1000 head. Previous extreme mortality events have indicated that goats do not cope well with the sea voyage. The move to air transport for goats is clearly cost-effective (13,694 goats we exported by air in 2017: http://livecorp.com.au/LC/files/00/00a6ac32-f1c4-4f96-9658-82ca66c74f03.pdf). The standards should be amended to exclude all goat exports by sea.
9.5	**Secondary inspection of goats prior to export**
	ASEL Review Technical Advisory Committee interim recommendation:
	10) Paragraph 1A.1.1 (b) should be amended to:
	a) 'When goats are exported by sea, they must be inspected by an authorised officer or AAV at least once during export preparation, (excluding the day of delivery to the registered premises and day of final inspection prior to loading), to confirm the goats have been held in the registered premises for five (5) days and fed appropriately as per Appendix D.'
	b) apply to all sea voyages of goats.
	RSPCA does not support the export of goats by sea as per the above comments.
9.6	**Horn requirements**
	ASEL Review Technical Advisory Committee interim recommendation:

	11) Consistent with the Land Transport Standards 'Horned bulls should have the nonvascular tip removed to a diameter of three cm.'
	a) Paragraph 1A.3.2 (b) should be replaced with a requirement that horned cattle must have the nonvascular horn tip removed to a diameter of three centimetres.
	Support. However, consideration must be given to whether this would require reduced stocking densities to allow for additional trough space and to reduce horn interference/injury.
	12) No change to paragraph 1A.3.3(b).
	13) Paragraph 1A.3.5 (b) for goats with horns, should be amended to read …. 'If horned, with horns that are likely to restrict access to feed and water during transport and/or endanger other goats or stock handlers, the horns must be tipped to remove the points, with only the solid non-vascular horn cut.'
	RSPCA opposes the export of all goats for reasons previously explained. In addition, goats with horns should not be exported due to the additionally high risk of injury.
	14) No removal of long horn management plans.
9.7	**Sourcing of sheep through Darwin, Weipa or Wyndham**
	ASEL Review Technical Advisory Committee interim recommendation:
	15) Change the requirement of paragraph 1A.3.4 (d)(v) to be geographic – all ports north of 20 degrees South
9.8	**Water engorgement management**
	ASEL Review Technical Advisory Committee interim recommendation:
	16) The provision of water to animals within a registered premise is under the domain of state or territory legislation and the Australian Animal Welfare Standards and Guidelines. Paragraph 2B.1 (c) to be deleted
9.9	**Proposed duplication areas with the Land Transport Standards**
	ASEL Review Technical Advisory Committee interim recommendation:
	17) While ASEL 2B.6 (a) and (b) address issues that come under the domain of the Australian Animal Welfare Standards and Guidelines and may be considered as duplication, are considered fundamental to ASEL and are to be retained.
	Support.
	18) Appendix B contains shorter periods of curfew and travel before rest for animals to be exported. This is due to the cumulative stress of transport through the supply chain. Appendix B should be retained
	Appendix B should be retained but the maximum time off water should be reduced to 12 hours to account for cumulative stress.
9.10	**Extension of long-haul voyage requirements**
	ASEL Review Technical Advisory Committee interim recommendation:
	19) Paragraph 3A.3.2 (h) should be amended as follows: **a) 'For all sea voyages via the Suez Canal, the Cape of Good Hope, the Panama Canal or Cape Horn, or via any other route where the voyage is expected to be longer than 30 days, the statutory reserve of additional fodder that must be loaded must be increased to at least seven (7) days.'**
	Support.