Review of Australian Standards for the Export of Livestock – Stage 1

Re-format and Priorities Submission

VETS AGAINST LIVE EXPORT

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Introduction

The founding members of Vets Against Live Export (VALE) comprised a group of veterinary scientists from many different backgrounds including livestock production, abattoirs, animal welfare and behaviour. The majority of these veterinarians had authored numerous substantial peer-reviewed articles in their field and almost all were editors and/or reviewers of international peer-reviewed scientific journals. With this background, the veterinary scientists independently analysed all previous government reviews back to 1983, government reports (Shipboard Performance Reports, Parliamentary Mortality Reports, Voyage Investigation Reports, Marine Orders), relevant Meat and Livestock Australia (MLA) documents, other relevant livestock standards, transcripts from court cases and all peer-reviewed scientific literature published on the Australian live export trade. This independent and scientific analysis revealed that animal welfare in the Australian live export trade is poor and that the trade is uniquely and inherently risky with respect to animal welfare. It was this independent and objective scientific review that led to the formation of VALE.

ASEL Review 2013

By the time of the ASEL Review of 2013, VALE had also performed on-ground monitoring of the live export trade in order to witness land operations firsthand. It was apparent that ASEL v2.3 was regularly flouted in Western Australia where most of the observations were made. Animals with conditions that were not fit and healthy to load either as defined by ASEL v2.3 or Australian Land Transport of Livestock Standards were regularly trucked to Fremantle Port. In addition, other conditions of ASEL such as the required truck inspections 30-60 minutes after loading and then every 2-3 hours en route from the feedlots to Fremantle Port were not observed.[1] VALE members observed trucks from Kojonup to Fremantle Port on multiple consignments confirming categorically that drivers were not abiding by ASEL v 2.3 S2.16. Given that compliance to ASEL whilst the animals were still in Australia appeared poor and that there was no policing, there seemed no point in fine-tuning ASEL. Standards are only ever useful if they are adhered to rigidly with compliance assured and in 2013, the process was failing. In addition, it is evident from close analysis of the National Livestock Export Shipboard Performance Reports that mortality rates had not altered substantially over the past 10 years despite ASEL. VALE chose not to submit a review at that time as any review of standards which were regularly contravened seemed pointless.

ASEL Review 2018

It is concerning to VALE that the first priority of the ASEL Review is formatting. VALE believes that it is imperative that the first step should be an independent highly analytical and critical scientific review of relevant government, industry and peer-reviewed literature. For true independence, the reviewers may need to be sourced from another country so that there is no real or perceived bias to industry or welfare advocates. Once this is performed, a careful assessment of prior government reviews should be performed to ascertain which of the recommendations have actually been implemented (and what the outcome of those changes were) and to ascertain if in hindsight, adverse events would have validated and

[1] S2.16 Livestock must be checked to ensure that they are evenly distributed and remain fit to travel:….
(b) within 30–60 minutes of commencement of the journey;
(c) at least every 2–3 hours as road conditions warrant; and

justified recommendations that were not implemented. Only with this approach will the major issues be identified and the adequacy (or otherwise) of major prior recommendations (eg Keniry 2004) be assessed.

Structuring the review process in this fashion would also enable relevant scientific and industry findings to be considered and analysed at the time when each component of ASEL is reviewed. As per all evidence-based literature, peer-reviewed published scientific literature should be considered as the highest level of evidence noting carefully however, that some of this literature has been funded by government (supportive of industry) or industry itself (which can cause intentional or unintentional bias). Industry based documents such as research or other non- peer reviewed reports should be closely scrutinised and analysed for such bias. The review should be undertaken by appropriately qualified researchers who have no conflict with respect to any key stakeholder group. All stakeholders should be provided with a copy of the independent scientific review and the review should be publicly available. Without such a process, any review of ASEL is ad hoc and open to criticism for not being scientifically robust. Any reformatting should follow the review process.

VALE Assessment of ASELv2.3

Having already performed such a comprehensive and critical review before founding VALE, VALE believe that tinkering with ASEL is likely to be mere window dressing unless the following five issues are addressed and prioritised:

1. Heat stress and voyages to the Middle Eastern summer
2. Lack of an independent veterinarian on board every ship
3. Space allowances
4. Inanition/salmonellosis complex
5. Inadequate bedding

The most critical of these and the easiest to rectify is the export of Australian livestock to Middle Eastern summers. These voyages must cease if the next version of ASEL is to be credible in its attempts to address animal welfare.

1. Heat stress and voyages to the Middle Eastern summer

General

Heat stress has been reported as a major factor causing poor animal welfare and high mortalities (Caulfield et al. 2014). Two government reviews of the live export industry have also highlighted heat stress as a significant issue (Keniry, 2004; Farmer, 2011). Peer-reviewed experimental studies have been performed under optimal conditions (ie greater than shipboard space allowances and individual pens) and the findings of these studies have been consistently ignored by the government, including the very basic definition of “heat stress threshold.” The government definition of heat stress threshold for sheep and cattle respectively has been set at wet bulb temperatures higher than those demonstrated to cause significant heat stress in experimental animals in best-practice land environments (Beatty 2005, Beatty et al 2006, Stockman et al 2011).

Risk for animals exported to a Middle East summer

National Livestock Export Shipboard Performance Reports published by the government have consistently demonstrated much higher mortality in animals, particularly sheep, transported from the Australian winter to the Middle Eastern summer but also cattle from Northern Australia during "the wet season". Nothing has changed in the last 10 years and the graphs can essentially be laid one on top of each other like tracing paper (notwithstanding the exclusion of the annual extreme mortality events that is routine practice in these reports).

Most of the voyage information available to the public is that from high mortality voyages. However, the few available reports of voyages in which the ASEL mortality limit was not exceeded indicate that animals experience heat stress during typical voyages but do not necessarily die (Maunsell Australia 2003, Norris et al 2003, Beatty 2005). In one report, maximum WBT levels of 34–35ºC and severe heat stress were recorded in all sheep (over 69,000 animals) for at least 7 days.[2] In another voyage, a cattle consignment with acceptable mortality had respiratory rates in excess of 70 bpm for 19 continuous days with respiratory character scored as normal throughout.[3] Heat stress was only recorded on three of those days, in each case being classified as mild despite average respiratory rates for cattle on most decks being 90-95 bpm

Of even more concern is the failure to analyse extreme mortality events. Since 2009, each extreme mortality voyage to the Middle East has occurred in a peak heat period: August 2009, June 2010, July 2010, August 2010, June 2011, September 2013, July 2016 and August 2017. The pattern is very obvious: 8 out of 8 Middle East disasters in 8 years occurred in summer/early autumn in the Middle East.

It is evident that when adverse heat and humidity conditions occur in predictable locations in the Middle East (eg Qatar and Straits of Hormuz) that nothing can be done on ships to prevent "heat crashes". Increasing space for each sheep is routine (see High Mortality Voyage Report 65[4]) indicating that a) space allowances under Hotstuff are clearly recognised by the exporters and shipboard veterinarians as inadequate (High Mortality Voyage Report 37, 38 and 65) and that b) increasing space for all sheep (either by altered configurations or substantial reduction in sheep numbers due to death or discharge) have failed to prevent extreme mortality events (High Mortality Investigation Reports 38, 38 and 65).[5] All available evidence indicates that the risk of heat stress in Australian animals transported from an Australian winter to a Middle Eastern summer is impossibly high and unavoidable (Caulfield et al 2014, Stockman et al 2011, Beatty et al 2006).

The Keniry Review (2004) recommended that 'exports should be banned in circumstances where the available evidence indicates that the risks of adverse outcomes are predictably

[2] See: http://www.vale.org.au/high-mortality-voyages.html Investigation into the reportable sheep mortality level on a sea voyage from Fremantle, Western Australia to Bahrain, Kuwait and the United Arab Emirates (UAE) Report 38 (accessed 18 March 2018)

[3] See FOI 2011/12-52 An application seeking access to documents in relation to a shipment of cattle from Australia to Turkey, June 2011 (no longer accessible on the Australian Government website but held by VALE).

[4] See: http://www.agriculture.gov.au/export/controlled-goods/live-animals/livestock/regulatory-framework/compliance-investigations/investigations-mortalities#consignment-65-sheep-exported-by-sea-to-qatar-kuwait-uae-and-oman-july-2016 (accessed 18 March 2018)

[5] See: hthttp://www.vale.org.au/high-mortality-voyages.html (accessed 18 March 2018)

high' (Recommendation 6). Seven years later, the Farmer Review (2011) recommended that a review of ASEL 'should inter alia examine the policy on export of sheep from southern ports to the Middle East in winter months, with a view to: mitigate feedlot and shipboard losses in adverse weather conditions; mitigate losses from heat stress and inanition during the voyage' (Recommendation 6).

Despite this no action has been taken to cease voyages during this high-risk season and adverse animal welfare and high mortality rates continue on these voyages. If the 2018 ASEL Review is to be meaningful, then voyages of sheep and *Bos taurus* cattle from an Australian winter to the hottest months in the Middle East must cease.

Heat stress risk assessment (Hotstuff)

The 'heat stress risk assessment' model developed by the industry and used by exporters to assess heat stress risk has not been independently validated or assessed against industry performance (namely the desired reduction in extreme mortality events). A full description of how the model is designed or functions is not available. The model, which forms the basis of decisions regarding heat stress risk, must be independently reviewed as part of the ASEL review process. A recommendation for revision of the model and space allowances was made in High Mortality Investigation Report 38 (2011).[6]

2. Independent veterinarians on all voyages

VALE has consistently called for veterinarians to be present on all voyages. Despite this, veterinarian accompaniment of voyages has actually decreased. It is of considerable concern to VALE that voyages greater than 10 days, which used to be accompanied by veterinarians are routinely now only accompanied by a stockperson (Export Advisory Notice 2016-14). Voyages to North East Asia are particularly relevant in this regard. Veterinarians are the only professionals that have the adequate training in health, disease, pathophysiology and treatment to ensure animals are appropriately monitored, treated and, where necessary, necropsied with appropriate sample selection. This essential requirement has been recognised by other organisations including the Australian Veterinary Association (AVA). That an onboard stockperson (who has a done a four day training course) is a legal requirement under ASEL v2.3 when a veterinarian is not indicates that animal health and welfare is not appropriately prioritised under ASEL.

VALE (and AVA) have also consistently called for all veterinarians on live export voyages to be independent of the exporter. In order that animal welfare can be accurately assessed and analysed, the entity profiting from the trade must not be the employer of the veterinarian. For example, it is obviously very difficult to analyse the true prevalence and impact of heat stress when employers of shipboard veterinarians routinely advise against recording morbidity or mortality due to heat stress.

VALE would also prefer more than one veterinarian to be present on large consignments, for long voyages and voyages with higher perceived risk. It is often physically and mentally impossible for a single veterinarian to provide care to large numbers of animals, especially in high-risk situations such as voyages to the Middle East summer.

[6] See: hthttp://www.vale.org.au/high-mortality-voyages.html (accessed 18 March 2018)

3. Space allowances

VALE has analysed existent space allowances for live export voyages. For cattle and sheep, the space allowances are almost unchanged since 1983 (and likely before that). A table of space allowances has been included for cattle (Table 1). It is evident that apart from some minor increases in allowances for cattle travelling from southern latitudes in an Australian winter, all allowances are unchanged or even decreased. There were no studies performed prior to 1983 to define these space allowances with respect to animal welfare. As such, they are entirely arbitrary designations with no scientific or animal welfare basis. The current on-board space-allowances do not conform to OIE recommendations and are less than any similar Australian land standards (see Table 2). They do not conform to any allometric principles (Petherick and Phillips 2009) and do not permit free movement of animals or easy access to food and water. The tight space allowances pose a considerable risk to animals with respect to injury, inanition and, heat stress. In addition, these space allowances do not permit easy inspection of animals in pens, impeding the capacity to identify and treat sick or injured animals.

4. Inanition

The inanition/salmonellosis complex is still the major cause of morbidity and mortality on routine sheep voyages. Due to commercial expense, the industry has not made substantial efforts to reduce this by identifying shy feeders in the feedlot. Industry failure to address this led to a routine voyage as being judged cruel in a Western Australian magistrate's court in 2008.[7]

5. Bedding onboard ships

All animals must be provided with appropriate bedding to ensure comfort and to minimise injuries such as abrasions and soft tissue damage.

The current provisions for bedding under ASEL (Appendix 4.3) particularly as they pertain to cattle and buffalo[8], are inadequate. Currently, the bedding requirement for cattle is either non-existent (Brisbane/Northern ports) or inadequate. Industry actions (eg loading expensive bedding despite no requirement for such; see High Mortality Voyages 61[9] and 68[10]) indicate that even though ASELv2.3 doesn't recognise the importance of bedding, industry certainly does. Recommended provision of bedding is currently greater for cattle in saleyards despite the relatively short holding periods.

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[7] See: http://www.banliveexport.com/documents/Al_Kuwait_Reasons2.pdf (accessed March 18, 2018)

[8] 4.3.1 Cattle and buffalo
(1) Cattle and buffalo exported on voyages of 10 days or more must be provided with sawdust, rice hulls or similar material to be used exclusively for bedding at a rate of at least 7 t or 25 m3 for every 1000 m2 of cattle pen space.
(2) This does not apply to cattle and buffalo loaded from Brisbane or a port north of latitude 26° south and exported to Southeast Asia or Japan.

[9] See: http://www.agriculture.gov.au/export/controlled-goods/live-animals/livestock/regulatory-framework/compliance-investigations/investigations-mortalities#consignment-61-cattle-exported-by-sea-to-vietnam-march-2016 (accessed March 18 2018)

[10] See: http://www.agriculture.gov.au/export/controlled-goods/live-animals/livestock/regulatory-framework/compliance-investigations/investigations-mortalities#consignment-68-cattle-exported-by-sea-to-brunei-darussalam-and-sarawak-april-2017 (Accessed March 18 2018)

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Relevant Tables

Table 1: Space allowances for cattle 1983 to 2018. Figures in blue indicate the largest space allowance, figures in red are the smallest space allowances. Figures in black indicate space allowances between the greatest and smallest allowances.

Cattle weight	**1983**	**1999 >10 days**	**1999 <10 days**	**ASEL 2011 >10 days**	**ASEL 2011 <10 days**	**ASEL** port south of latitude 26° **May-Oct**	**ASEL** port south of latitude 26° **Nov-April**
200kg	0.90	0.77	0.77	0.77	0.77	0.847	0.77
300 kg	1.175	1.110	1.110	1.110	1.110	1.221	1.110
400kg	1.45	1.45	1.45	1.45	1.45	1.668	1.45
500kg	1.790	1.790	1.725	1.790	1.725	2.060	1.932

Table 2: Space allowances in ASEL v 2.3 compared to space allowances in codes relating to other intensive housing systems.

Sheep (for a weight of 47kg)	Space allowance m^2 per animal
On board ship (ASEL 4.12)	0.308
In a live export pre-export feedlot (ASEL 3.11)	0.33-0.6
Saleyard selling – holding pens (Model Code of Practice – Saleyards)	0.47-0.8
Feedlots (shipping assembly – outdoor) (Model Code of Practice – Sheep)	1.3-1.5
Intensive indoor systems (Model Code of Practice – Sheep)	0.5-0.9
Cattle (for a weight of 330kg)	
On board ship (ASEL 4.12)	1.212-1.333 (depending on time of year)
In a live export pre-export feedlot (ASEL 3.11)	2.64
Saleyard selling pens (Model Code of Practice – Saleyards)	2.25-2.7
Feedlots (Model Code of Practice – Cattle)	9 (outside) 2.5 (shedded)