

3 February 2011

Bobby Calf TOF RIS Submissions
Animal Health Australia
Suite 15
26-28 Napier Close
DEAKIN ACT 2600

By email: consultation@animalhealthaustralia.com.au

Dear Sir/Madam

Animals Australia submission to the proposed Standard for time off feed for bobby calves.

Animals Australia appreciates the opportunity to provide a formal submission to the current consultation regarding the welfare of unwanted bobby calves during their transport and holding prior to slaughter. Regrettably we believe that the review process, the current consultation process, and the Regulatory Impact Statement (RIS) (assumptions and recommendations), have been conducted in a manner that will not benefit the welfare of unwanted bobby calves.

The animal welfare issue is well stated in the RIS (page 8) –

Bobby calves are physiologically immature with little fat reserves, poorly developed thermo-regulatory mechanisms and a lack of responsiveness to external stimuli. These factors predispose them to difficulties in coping with transport and handling. Excessive time without feed increases the risk of bobby calves becoming hypoglycaemic and even more difficult to handle.

Further, and quoting from an earlier 'Discussion Paper' by Animal Health Australia (AHA - July 2009) –

This is the largest systematic movement of peri-natal, unweaned, mammalian livestock in the country and it continues to attract the attention of animal welfare organisations and individuals.

In our view the current proposal for a standard that allows young vulnerable calves to continue to be subjected to an ordeal during their last one to two days of life will provide no significant improvement to the status quo. That is clearly what the dairy, transport and processing industries sought at the outset of this process. Any suggestion that this standard will provide 'benefits' are not supported by credible information provided in the RIS.

Animals Australia's position regarding the feeding of unwanted bobby calves is focussed on reducing their suffering:

- As a minimum bobby calves on farm should be fed twice daily during their first week of life.
- Unwanted calves should either be killed humanely on farm (as described in the current Standards and Guidelines, but with the addition of 'bleeding out' to ensure death), or be transported by the quickest route to the nearest abattoir with calf killing capacity.

- Calves must be either killed or fed by the end of the day on which they leave the farm (i.e. within 12-18 hours of the last feed).
- Only Option D (18h Time Off Feed (TOF)) could accommodate these requirements and therefore mitigate the stress caused to these animals.

1. Introduction:

The RIS advises that the 'overarching policy' objective is:

To ensure that the conditions under which bobby calves are transported on land are consistent with reasonable animal welfare standards.

Animals Australia has argued during the review of bobby calf standards to date that denying milk (liquid feed) to bobby calves for up to 30 hours is unacceptable on animal welfare grounds. In our view, supported by community views and by science, 30 hours off food is not a reasonable welfare standard. These issues will be addressed in more detail throughout this submission.

It should be noted that Animals Australia has also indicated its concerns (in 2006-9) about the other low Standards for bobby calves already incorporated into the Land Transport of Livestock Standards (i.e. age at transport, distances to abattoir, insufficient space and bedding on trucks and at abattoirs). Our view then, and now, is that bobby calves should be fed twice daily.

In regard to the 'options' put forward, only Option D (max 18h TOF) would lead to sale, transport and slaughter arrangements being altered to ensure these young vulnerable calves are spared the ordeal of being held overnight at abattoirs (often cold and always hungry) for next day slaughter. Change to the common aggregation and transport systems for next day slaughter is overdue; the author and Animals Australia have made representations on this issue calling for strong laws to protect bobby calves over the past 3 decades. The adoption of Option B (30h TOF) will merely legally entrench current unreasonable practice.

Only government action, through the introduction of a higher Standard e.g. a maximum of 18 hours TOF (and its enforcement), can provide the protection required by bobby calves. This is a clear case of 'market failure' and thus there is a need for intervention.

2. Concerns about the review process

It is concerning that the current review has been conducted such that the purpose has been merely to legalise current practice, rather than effecting a change to inadequate bobby calf treatment. As noted in the Minutes of the meeting of the Bobby Calf Reference Group (August 2009) and the RIS, neither Animals Australia nor RSPCA Australia supported the proposed 30h TOF Standard.

In addition to substantive concerns about the outcome and its characterisation as being of benefit to calves and 'science-based' (expanded upon below) the review process was itself flawed.

2 (a) Misleading documentation

First, some documentation provided to the stakeholders has been misleading. Of particular concern was a July 2009 document prepared by AHA and provided to the 'Bobby Calf Reference Group' which purported to set out relevant TOF national (model) and State code clauses and industry guidelines (as an Annex to an outline for the proposed RIS). The document was used as a basis for discussion of the proposed standard at the August 2009 (and only full) meeting of that group.

It has recently come to our attention that the document failed to include for comparison the following important clauses of the current national Cattle Model Code of Practice (Report 85):

5.11.2 ... Bobby calves being transported or awaiting sale or slaughter should not be deprived of appropriate liquid feed or water for more than 10 hours.

The same document similarly failed to include the following relevant clauses from the Land Transport of Cattle Model Code of Practice (Report 79):

5.4.5 Calves are especially susceptible to stress and care is required to ensure they are strong enough to withstand transportation. The following considerations apply especially to calves less than one month of age:

- *they should be fed within 6 hours of transportation and must not be left without appropriate liquid food for more than 10 hours;*

Instead the reference document inserted other clauses from those same national Codes which provided overarching recommendations (unrelated to the additional stresses of transportation) that calves not be *'deprived of access to food for periods longer than 24 hours'*.

Perhaps not surprisingly then, the current RIS which has been released to assist the public consultation phase, similarly fails to advise of the existing directly relevant national Cattle and Land Transport of Cattle Code clauses. These codes are 'recognised' as the default code in the States and Territories. These clauses clearly recommend calves not be deprived of milk for more than 10 hours during this stressful and exhausting handling and transportation phase. Instead the RIS states:

As yet there is no state or territory standard or guideline dealing directly with TOF for bobby calves, except in Victoria. The Victorian guideline recommends slaughter within 30 hours of leaving the farm, and strategies to achieve daily feeding, but compliance with this guideline is voluntary. (RIS summary iii).

[Note: The Victorian code also states: *In any event, calves should be fed at least once every 24 hours.*]

The RIS is therefore misleading, and this is particularly serious given that those national Model Codes of Practice were agreed by industry and have for many years been lauded as an indication of industry good practice. That misrepresentation of the current industry guidelines represents a substantial failure at the very time when the treatment of vulnerable bobby calves was and is up for public debate about enforcement. Those clauses should have been clearly presented to decision makers - the Bobby Calf Reference Group and the interested community.

2 (b) Scientific work secondary to the proposal of a 30h TOF Standard.

It is of concern in regard to 'process' that at the meeting of the Bobby Calf Reference Group in August 2009 that Dairy Australia and Australian Dairy Farmers representatives, supported by other farm industry organisations, proposed (and it was 'agreed' by majority) that the proposed 30h TOF standard would go forward. At that same meeting dairy industry representatives argued that further science was required to examine the welfare effects of 30h TOF, and then announced they had commissioned such research. Animals Australia (and the RSPCA representative) indicated to the meeting that it was incongruous and totally unacceptable that Dairy Australia argued that research was required and would (later) occur, and then concurrently pre-empt the research outcomes by adopting the 30h TOF Standard proposal at that meeting.

That proposed research was subsequently undertaken later in 2009 and finalised in around April 2010 (Fisher et al 2010ⁱ). The reference Group did not meet again. It was clear then (August 2009) and now that the commissioned research was an attempt to garner 'scientific' support (and thus subsequently political support, i.e. PIMCⁱⁱ) for current practice and to thus undermine calls for change (i.e. a reduced TOF for calves).

2 (c) Failure to advertise the public consultation

Despite the fact that consumers of milk are key stakeholders in dairy welfare issues, neither the government nor the dairy industry advertised the public consultation on this proposed Standard. This is despite documentation accompanying this draft Standard stating that public consultation is to be the:

'final step...where the general community and consumers, as well as interested stakeholders have an opportunity to comment on ... the proposed standards...'. (RIS page 12).

The Land Transport Standards and Guidelines consultation process (in March to May 2008) sought to include three tiers of stakeholders, 'key stakeholder', 'other stakeholders (said to be represented by formal organisations/groups) and 'interested public', and targeted them with direct contact or in the case of 'interested public' via newspaper public advertisements (albeit very limited)ⁱⁱⁱ. By contrast this bobby calf Standard public consultation was not advertised, and so the 'interested public' tier was neglected totally. A decision was instead made by the consultant facilitators – Animal Health Australia (AHA), not to advertise presumably in consultation with the Government-based 'Animal Welfare Committee') due to the 'high cost'.

Instead the stakeholder groups were relied upon to provide notice of the 'consultation' through networks to interested members or others. It was disappointing then to further find that notice of the current consultation was not highlighted on the dedicated 'Animal Welfare Standards' website^{iv} homepage, and nor did the key industry stakeholder Dairy Australia highlight it on it's own front web page.

This failure to alert the community is even more baffling given the current RIS (which accompanies the consultation process) states relevantly in regard to the 'policy objective' of the proposed Standard (Page 15):

*To ensure that the conditions under which bobby calves are transported on land are consistent with **reasonable** animal welfare standards.*

...

*The word 'reasonable' embraces the need for standards to be informed by science, industry knowledge and **community expectations**, with their overall benefits outweighing their costs. The policy objective is also consistent with the AAWS vision statement:*

'The welfare of all animals in Australia is promoted and protected by the development and adoption of sound animal welfare standards and practices.'

*As part of the assessment, there will be a need to ensure that the benefits of an additional standard justify its costs, and that it **meets the expectations of the Australian and international communities**. (Animals Australia emphasis)*

The RIS (Page 17) also acknowledges that

'the successful pursuit of many industries involving animals is dependent on community confidence in the regulation of animal welfare'.

Finally in regard to the deficiencies of the 'public' consultation on this Standard, it is noted that the 30 day period fell during January which is traditionally a 'down time' for many direct stakeholder organisations and members of the broader community. This would further reduce the accessibility for interested people and is regrettable.

3. Community interest and concern

That the community, and particularly the 'interested public', would wish to be informed of this proposal is also amply demonstrated through past engagement. For example we note that the Envision report (see end notes) on the 2008 consultation (for the Land Transport of Livestock Standards and Guidelines) tabulated that 63% of the submissions were prepared by individuals (not from formal organisations).

Of further relevance, the Envision report notes –

- the majority of respondents (59%) indicated they did not believe the new cattle transport Standards would protect the welfare of cattle during transport,
- some offered further comments including concern about cattle travel time, the need to improve conditions, and the need to raise the allowable age for the transport of bobby calves, and
- in written comments to the consultation related to cattle, the most frequently mentioned issues were the (long) time off water (for cattle generally) and the welfare of bobby calves.

Another indicator of the importance of this issue is the consultative work undertaken by the Animal Welfare Science Centre (AWSC) in 2002^v. This consisted of workshops and consultation with some 300 stakeholders (industry, government and community organisations) to determine key animal welfare priorities for Australia. The report in regard to the issues within the dairy cattle industry reported that bobby calf transport and handling was '*extremely important*' and was listed at the top of the priority listing.

In addition to the detailing of priority concerns about bad handling, transport and layover prior to slaughter, the AWSC document highlights the '*extremely important*' issue of '*Number of calves being loaded at 3-3.5 days of age – less able to withstand rigours of transport*'.

Animals Australia advertising: In the absence of Government or industry advertising to alert the community to the current bobby calf TOF 'public consultation', Animals Australia deemed it important to advise the community and placed advertisements in each of the capital city daily papers (27/1/2011). We also provided information, background and a link to the AHA website to facilitate the process of the 'interested public' making submissions to the process.

The response directly to Animals Australia has been overwhelming – responses by phone, email, post and online forums – and has eclipsed the level of interest from most awareness campaigns in recent years. The most common message is that interested community members were not aware that young calves were removed from their mothers and transported to slaughter without being fed during their last 1-2 days of life. Once advised most are incensed that these young calves could be kept so long without milk, and that this has not been openly discussed.

No-one should be surprised at this community reaction as numerous studies have shown that interest in animal welfare is high in Australia, and the community is keen to have input into such important public policy. One comprehensive research report^{vi} on 'Attitudes Towards Animal Welfare' (TNS Social Research Consultants, 2006) found that while participants possessed '*a keen interest in the topic*' they nevertheless exhibited '*a shallow understanding of the issues*' (page 12),

particularly in relation to farming practices (page 13). This deficiency in knowledge was largely attributed to *'an absence of balanced information in relation to animal welfare'* (page 15), and *'demonstrated the need for increased public awareness initiatives'*. Despite such deficiencies a key concern raised by participants in the TNS study was the transportation of livestock (page 18).

A 2009 *NewsPoll Sydney* survey (commissioned by the Vegetarian/Vegan Society of Queensland) noted similarly high levels of national community interest in animal welfare issues. The survey found that 99% of the survey respondents were *'against cruelty to animals'*. Of relevance to this Standard consultation, the NewsPoll survey found in relation to the ethical question about respondents' view on 'making cows pregnant every year and taking their calves from them to obtain milk' - 47% said this was *'unacceptable'*. There was no question relevant to TOF for unwanted bobby calves.

4. Concerns about the RIS

In our view the RIS does not provide a sound and fair assessment of all those issues that should contribute to the benefits and risk analysis, and is thus not a good basis on which to assess the proposed standard. Some of the main concerns are listed here and others relevant to other sections appear elsewhere.

There is an over-reliance on the findings of a single unpublished study (discussed elsewhere) to declare as the RIS does that there is *'clear scientific evidence'* (Pages 15, 20, 42) for the proposed Standard. This too is against a backdrop of a seeming disregard for established overseas standards for feeding young calves and greatly restricting the time and distances they can travel.

4 (a) International guidance documents include (RIS page 11):

- The European Union - calves of less than 10 days may only travel for a maximum of 100 km, and require once daily feeding.
- Canada – young calves in transit should be fed at intervals not exceeding 12 hours
- England - Regulations (2007) require all calves must be fed at least twice a day

These indicators of recommended good practice are then arbitrarily dismissed as irrelevant as it applies to calves kept for rearing and fattening and transport distances are much shorter in the UK.

A more cynical interpretation may be that as most bobby calf products are exported to the USA and Japan which do not have such recommended standards, there is no likely trade barrier implication for Australia. New Zealand exports may compete, but their bobby calf standards are comparable to Australia's proposed Standard.

4 (b) Australian guidance documents:

The RIS rightly points out that there are no enforceable Standards at present (noting though that the Land Transport Standards will introduce a Standard for calves to be fed 6 hours prior to transport pending).

However, as discussed on page 3 (related to the deficiencies of the review process) the RIS then asserts that *'as yet there is no state or territory standard or guideline dealing directly with the TOF for bobby calves'*, save for the Victorian Code which the RIS then notes recommends slaughter *within 30 hours of leaving the farm* (7.3.4). But as the RIS also records, the Victorian Code further says:

(7.3.7) 'In any event, calves should be fed at least once every 24 hour's.

The two statements are not contradictory – the first (7.3.4) relates to a limit on the length of the ordeal from farm gate to eventual slaughter, and 7.3.7 relates to TOF and given the initial words ‘in any event’ is clearly intended to recommend calves in Victoria to be fed each 24 hours even during this process. This is a crucial omission given Victoria accounts for an estimated 70% of all bobby calves in Australia.

The RIS then also fails to record that other state and territory Codes currently deal directly with TOF for bobby calves, and importantly fails to provide reference to directly relevant clauses in the two relevant national Model Codes (which are in turn ‘recognised’ in the other states and territories).

Specifically:

- The Tasmanian bobby calf ‘Guidelines’ states that calves may only be transported for 10 hours, must be fed within 12 hours of transport and if held in saleyards must be fed after 10 hours and ‘*at least 24 hours thereafter*,
- The WA Code states that calves ‘*must not be left without food or water for more than 12 hours*’, and
- The current national Model codes (see page 3 above for detail) state that calves during transportation must not be left without appropriate liquid food for more than 10 hours (as discussed at 2(a)).

Whilst it is recognised that these Codes and guidelines are not enforceable, they are industry approved documents used by the cattle and dairy industries publicly for several decades to describe their usual treatment of their animals. It has been implied that these Codes describe and reflect minimum industry standards (though this is not supported by the assumptions and information contained in this RIS!). Regardless, to omit them from the RIS gives the impression that the proposed 30h TOF is to be introduced into a vacuum and that this is ‘better than nothing’. Indeed this argument has erroneously been stated publicly by dairy industry spokespeople in recent weeks.

The introduction of an enforceable Standard over existing unenforceable guidelines (codes) would appear to be an advance. However, given the RIS acknowledges or purports that at least some 99% of all calves are currently being slaughtered within 30 hours TOF (and indeed ‘the vast majority’ within 24 hours), the proposed enforceable Standard is a minimal advance (assuming enforcement effort occurs).

4 (c) Assumptions in the RIS

For each of Option C (24h TOF) and D (18h TOF) the RIS authors have made assumptions about what would happen to bobby calves that currently would not be slaughtered within those time limits, and then based their costings on those assumptions. For Option C the assumption is that 10% of all unwanted calves would become unavailable for slaughter (page 45), and for Option D the assumed figures is 85% of all calves would become unavailable (page 52) as most would instead be killed on farm.

The RIS authors have based these assumptions on ‘discussions with industry’ and no further detail is provided. In our view it would seem unlikely that the industry would forgo the millions of dollars of farm gate value presented in options C & D plus (more broadly) the additional wholesale and export value and incur the losses involved in on farm slaughter. As Animals Australia has put forward previously, changes to aggregation and buying systems, transport schedules and abattoir kill schedules could occur to ensure calves are not kept for such long periods without feed. Even the cost of providing one feed enroute to slaughter either at the sale yard or abattoir (which is estimated at \$4 per calf according to the 2008 RIS for the Land Transport of Livestock Standards and Guidelines) would seem miniscule compared to the alternate financial loss of killing calves on farm, a practice that farmers have largely shunned in any event. We find the assumptions unsound.

4 (d) Assessment of Costs and Benefits

It is evident from the outset that the RIS analysis has been undertaken to defend the 30h TOF as the options presented are those that the industry believes are feasible, rather than what might be possible if there was a legitimate will to improve bobby calf welfare through a change of practice. Many other industries are changing the way they operate to improve standards and services to meet community needs and expectations, so it is disappointing that there was no evidence in the RIS that the industry is willing to consider change. Instead emphasis has been placed on industry views on what could be achieved within the current system rather than consideration of what other models exist internationally that could be used to inform better practice.

Without further information on some of the costings and assumptions it is difficult to assess the merits of each option as each presents unanswered questions. For example: The cost benefit analysis has been undertaken using a farm based value of \$57.80 per bobby calf however there is no information provided on the derivation of this figure (and we are aware that the price of bobby calves at saleyards in recent months has sometimes been at least double that figure). There is no breakdown of the on-farm costs involved in the care of bobby calves during their time on the farm or the sale price. The RIS highlights that there is variation in feeding regimes on farm – once or twice daily, mostly once – but doesn't indicate what regime was used to develop these costings.

For options C (24h TOF) and D (18h TOF) there is analysis of the additional costs involved in undertaking on-farm calf slaughter and disposal either on the farm or by the knackery. However, there appears to be no calculation of the costs savings of not needing to feed calves over the stated 5-7 days that they are normally otherwise kept on the farm prior to slaughter. Without more detail on the farm value costs it is unclear if these are incorporated in these calculations.

5. Concerns about the 'use' of science in the review process.

The Primary Industries Ministerial Council (which approves Livestock Standards) has determined that new Standards should be 'science based' (as discussed at 2 (b)). Industry representatives Dairy Australia first insisted on the 30 hour 'time off feed' standard for bobby calves (in 2009) and then, second, commissioned a study intended to 'prove' the adequacy of 30 hours off feed. It is disingenuous to then claim that that science is at the base of this decision.

Indeed a discussion paper provided for the August 2009 meeting of the review group commenced by stating as fact that:

'Food deprivation longer than 24 hours for a portion of bobby calves sent for slaughter is a necessary practice in Australia to market some bobby calves.'

[Note: Animals Australia argued that changes to current calf feeding times, pick up systems and abattoirs shift schedules could accommodate same-day slaughter recommendations, and/or feeding of calves could be introduced at saleyards or abattoirs.]

The research commissioned by Dairy Australia and DAFF, and conducted by researchers from the University of Melbourne and the Animal Welfare Science Centre^{vii}, concluded (in 2010) that:

'30 h with good practice in other aspects of calf management and transport is defensible as an outer 'legal' limit for time off feed for bobby calves.'

'Best practice management of transported calves would involve time off feed not longer than around 24 h'.

Rewording of study conclusions:

It is of importance to note that the study's main conclusion has been subtly reworded in subsequent documents, seemingly (and in our view) to ensure it appears to fully support the proposed standard – as desired by the industry even prior to the study being conducted. The progression is documented here.

- (i) Melbourne University study full (unpublished) paper (May 2010) concluded that:

*'30 h with good practice in other aspects of calf management and transport is **defensible as an outer 'legal' limit** for time off feed for bobby calves.'*

- (ii) The RIS (page iii) (late 2010) states the proposed 30h Standard:

*'... **reasonable as an outer 'legal' limit** for time off feed for bobby calves, when combined with **appropriate** calf management and transport practices.*

- (iii) A 2-page 'Summary' of the research published on the AHA website (January 2011) as part of the consultation said the study concluded that:

*'30 h with good practice in other aspects of calf management and transport was **suitable as the maximum** time off feed limit for bobby calves'.*

Interested members of the community only reading the RIS and/or the 2-page summary provided on the AHA website (the only publicly available documents) will have been given a misleading impression that the scientists concluded that 30h TOF was 'reasonable' and 'suitable', rather than what the researchers actually stated: that it was merely 'defensible'.

6. Concerns with the current science

There are considerable problems with the research itself, and with reliance upon its conclusions to set the maximum food deprivation periods for bobby calves in Australia. These concerns are set out here.

The Fisher study is yet to be published in a scientific journal and has thus not been 'peer reviewed'. Problems of methodology, analysis and conclusions are therefore yet to be subjected to peer scrutiny and possible amendment.

6 (a) The Fisher study is unlikely to be representative of all bobby calves.

There were only 60 calves in the study from a single well-run farm selected because it would have a sufficient supply of calves in the short period of the study. The farm operators and workers were aware of the study and the need to provide for example adequate colostrums to the calves. The facilities included good shelter accommodation throughout (as indicated in photographs) including a straw lined three-sided shed. This was a very different scenario to either an open cement floored saleyard with multiple disturbances, or to an abattoir holding pen without bedding, which it was designed to mimic. The study was also undertaken during spring weather and thus did not occur during more extreme weather events such as during the winter in the south (when most calves are born and transported) or the heat of more northern dairy areas and/or during summer.

The calves in the study were fed 5 litres of milk replacer, yet costing assumptions in at least the 2008 RIS (for the Land Transport Standards) suggested 4 litres a day was the norm. Industry guidelines are consistent that bobby calves should be fed some 100ml of liquid feed per kg body

weight per day. For most bobby calves that may be some 35 – 40kg in weight, this would suggest only 3.5-4 litres of milk as the daily feed ration. Yet these calves were fed 5lt of milk which was said to be their normal ration. This may be another indicator that the subject farm did or does provide better preparation than most calves being sent to slaughter, but also therefore means that the results received may not be representative of most calves.

Thus it cannot be assumed that the calves were typical of those in the industry, and indeed they are probably not. Further study needs to be done to compare the metabolic state of calves that are in the bobby calf supply chain to see how they compare. In fact the study authors concede that their study was done with '*optimal animal handling*', and that this is not always the case '*in the real world*'.

It also advises that even in this study with '*dedicated staff who were also aware of our needs*' 22% of the calves had not received '*sufficient colostrum transfer of passive immunity*' i.e. insufficient colostrum from the cow or via workers. One calf got sick during the study, and the researchers commented

"...one would presume that if the calves had not been sent to the abattoir soon after the experiment, an increased level of morbidity would have been seen."

Problems with preparation of dairy calves:

The failure to provide adequate colostrums to some calves in this study is of concern given clear veterinary and industry recommendations for this. However the deficiency level detected here (22%) is lower than estimates for the entire industry, and thus a likely further indicator that the calves used in the Melbourne University study were better prepared than many calves. One recent estimate is that 40% of bobby calves fail to receive adequate colostrum.

Currently, it is estimated that up to 40% of calves do not absorb sufficient antibodies into their bloodstream within the first 12-24 hours of life because of inadequate colostrum intake and quality colostrum^{viii}.

Dairy industry veterinarians and Government inspectors have over many years advised (the author) that a high proportion of calves in the supply chain are not managed according to industry best practice, and that many would be -

- *less than their fifth day of life when transported (this trial included a spread of calves from 5 to 10 days of age),*
- *colostrum deprived, and probably not well fed on the farm of origin,*
- *some may not be housed appropriately or may even be kept out of doors until sale, and*
- *despite industry recommendations many do not have access to water on the farm of origin (and thus will be unable/unwilling to drink even if offered it at the abattoir overnight).*

6 (b) An independent scientific assessment of the Dairy Australia-commissioned study

Professor Clive Phillips and Jim Hogan (of the Centre for Animal Welfare at the School of Veterinary Science at the University of Queensland) were commissioned by Animals Australia to conduct an 'Independent Assessment of the DA Project (No. TIG 124). They advised they saw serious methodological and interpretation flaws and concluded:

'We do not agree with their conclusion that 30 h with good practice in other aspects of calf management and transport is defensible as an outer 'legal' limit for time off feed for bobby calves... In particular we believe that the calves experienced hunger for the majority of the study and probably tiredness as well.'

Some of the main findings of Phillips and Hogan are summarised here:

- It is detrimental to the digestive system of calves to be fed only once a day (see more in the section on animal welfare below).
- The 24 hours TOF being described as 'best practice' is disputed (best practice should mean the shortest possible period of transportation).
- They disagree with the 30 h TOF being described as 'good practice' – citing the calves experience of hunger, prevention of preferred lying and muscle strain through transportation.
- The temperature range was not reported, and so the results and recommendations may not apply to other seasons.
- They criticise the failure to include a 'control group' which included full/usual feeding on farm – thus measuring their levels against the cumulative issues of denial of food and transport.
- Blood chemistry analysis (even small decreases in blood glucose) show that calves would have begun to feel hunger about 9 hours post feeding, and then 'increase approximately exponentially until 30 h', but this aspect of welfare is not mentioned.
- There is need for some independent research to ensure the blood indicators 'reference range' used in the study are valid for these calves and their feeding regime.
- Regardless, the glucose concentrations of some calves (12%) were reduced after 30 hours to below the reference ranges – evidence that the calves were underfed and thus contravening two of the 'Five Freedoms', ability to perform normal behaviour and freedom from hunger.
- Phillips and Hogan point to other research which indicates that high concentrations of lactic acid in the blood may prevent convulsion during hypoglycaemia in calves (i.e. masking the expression of low glucose).
- Notes that the 12 hour transport group blood indicators show evidence of exertion and/or muscle damage.
- Phillips and Hogan are critical that cortisol was not measured as it would in their view have provided a reliable measure of stress*.
- The behavioural measurements were of limited value as they were taken whilst they were in a group and thus confounding normal behavioural expression.

* The RIS acknowledges that stress can be objectively measured in animals using indicators such as cortisol yet relies on a scientific study that doesn't measure this important indicator.

It is particularly concerning then, given the well-based concerns expressed about the methodology of the Melbourne university study, and particularly its unlikely applicability to the broader bobby calf transport issue, that the RIS for this consultation boldly states (RIS pages vii, 27 and 34 and elsewhere) that:

There is no science-based evidence of improvements to bobby calf welfare under 24hrs and 18hrs TOF as compared to 30hrs.

Indeed the Melbourne University study clearly shows that the measured biochemical variables in each case were progressively worsening throughout the study, but particularly from 24 hours onwards. This is hardly surprising given as Phillips and Hogan has indicated the feed provided to calves will have been broken down by about 9 hours after that last feed^{ix}. From that point onwards, these young calves would be hungry and would be drawing on their very limited bodily reserves. It is important here to restate a section from the RIS (page 8)

*Bobby calves are physiologically immature with little fat reserves,
Excessive time without feed increases the risk of bobby calves becoming hypoglycaemic and even more difficult to handle.*

In light of this clear statement of the fragility of these young calves, the following statement also from the RIS is extremely disappointing:

This RIS does not deal with perceived animal welfare benefits of the options; but rather looks strictly at scientific considerations, only utilising existing scientific research which measures physiological and behavioural indicators (as required by the PIMC resolution of 21 May 2009 calling for a science-based standard). (RIS Page 7)

This statement, taken in context with similar throughout the RIS, clearly indicates that the well being of the calves and particularly their experience of hunger, blood sugar depletion and tiredness from transport are all to be ignored when setting this Standard.

It is also instructive to note that industry guidelines have recommended twice a day feeding for bobby calves in the first week of their lives.^x

Animal welfare is to be addressed further below.

6 (c) The New Zealand science

The RIS and Dairy Australia have also relied on the NZ study by Todd, et al (2002)^{xi} to indicate it provides the scientific base for the 30h TOF. But again, as with the Australian Melbourne University/DA study, the conditions provided for the calves were unlikely to be representative of the industry. For example, the Todd study transportation provided a lower than usual density, and thus allowed the calves to be able to lie down during the journey and therefore produced a similar metabolic profile to resting non-transported animals – assumed to have a beneficial effect.

Not unlike the Fisher et al conclusions, Todd et al qualified their conclusions to take into account the sample calf characteristics and study conditions:

*'no detrimental effects after 30 hours feed deprivation on the metabolism of **healthy and clinically normal** calves under **mild conditions**'.*

A review of the welfare science for bobby calf welfare for the Australian Meat Industry Council (2008)^{xii} concluded on this point:

It might be suggested from the aforementioned [NZ and other] studies that the timing of the last feed (milk), the journey conditions and the duration of the journey/period of feed withdrawal are the most important factors for calves being transported'.

7. Further concerns about animal welfare –

The RIS has relied upon a well-recognised definition of animal welfare by Professor Donald Broom:

*[The animal's] state as regards its attempts to cope with its environment and includes both the extent of failure to cope and the ease or difficulty in coping. Health is an important part of welfare **whilst feelings** – such as pain, fear and various forms of pleasure – components of the mechanisms for attempting to cope and should be evaluated where possible in welfare assessment. [Our emphasis].*

Other eminent welfare scientists e.g. Duncan (2002)^{xiii} also clearly state that consideration must be given to the mental state of animals. However the RIS, despite using the Broom definition, does not then fully accept the importance of 'feelings' as a crucial part of animal welfare.

Despite the major aspects at issue during the consideration of this Standard being the fitness and ability to cope of the calves and their time of food, it is incongruous that there is then no discussion at all about the hunger that the calves will feel for much of those (up to) 30 hours of denial. Indeed the RIS goes onto describe 'hunger' as 'hypothetical' and not part of the RIS consideration:

The ethical questions and value judgements of hypothetical animal 'hunger and discomfort' are beyond the scope of the RIS; but may be important considerations in the wider decision making process for the social goal of addressing concern over the potential suffering of calves. (RIS page 22)

RIS says at vii, pages 27 and 36) –

The reduction in risk to calf welfare with these options is insubstantial, given the possibility of emergency feeding at abattoirs. The high costs of an alternative standard of either 24 hours or 18 hours TOF would not be justified in terms of either animal welfare outcomes or national consistency.

7 (b) Mortality as a blunt indicator

The extensive survey work done by Cave et al and published in the AVJ^{xiv} shows the average mortality of the calves surveyed during transport from meeting points (calf scales etc) in Northern Victoria to abattoirs in 1998, 1999 and 2000 was some 0.64% in the study. However – these were only the figures for the day of arrival at the abattoir, and does not include those calves who will have died overnight and/or before slaughter the following day.

If the average figure of bobby calves transported for slaughter derived by the RIS authors (RIS p. 4) is taken i.e. 700,000, then each year an estimated minimum of 4,480 calves die during transport to the abattoir. More will have suffered but survived, and some will still die after unloading, but before routine slaughter. Cave et al believe it is feasible to at least halve this 'annual cost' to the industry, by reducing the distance the calves travel to slaughter. The study did not examine any of the other variables involved (including TOF) except distance travelled, but the study does provide an insight into the numbers of calves that will have suffered and died during their journey from the farm.

A recent review of the scientific literature (by M.K.Edge for Australian Meat industry Council, 2008) noted:

'... whilst the literature reported examines mortality rates, mortality is obviously an extreme consequence in terms of animal welfare impact, thus it is likely that animal welfare was compromised in a higher number of transported calves.'

Given there is to be no substantive change to current bobby calf transport arrangements, this suffering and recordable mortality will continue at a similar unacceptable rate.

8. Concerns about implementation – enforcement issues

Regardless of the TOF standard finally adopted, there is a strong need for the Standards to be enforced. The suggested extra enforcement costs (in the RIS costings) are miniscule, so we have grave fears again that there will be 'no change' for bobby calves.

To enable enforcement there needs to be document trails, and this is acknowledged at clause SB4.5(v) of the Land Transport of Livestock Standards and Guidelines 2008. The relevant bobby calf standard calls for 'an auditable and accessible record system' regarding feeding prior to leaving the farm. The existence of the current National Vendors Declaration (NVD) for Bobby Calves which accompanies most if not all consignments of calves is the obvious candidate. However the current version is deficient:

- i) The form does not require the owner to provide or to certify the time the calf was last fed, and
- ii) The section (part B) related to the date and time the transport commenced is optional in South Australia, Tasmania and Victoria.

Without this information (even with the attendant limitations of proof of the declaration) the NVD in its current form will not provide the details required to accurately estimate the time individual calves have been off feed. Clearly the form and its required use needs to be altered to ensure all relevant information is collected to ensure compliance with the standards can be accurately audited.

9. Conclusion

Change to protect the welfare of bobby calves is long overdue. The Land Transport Standard, including this proposed bobby calf Time Off Feed of 30 hours, has been designed to cater for (protect) the worst operators not the vulnerable young calves. It is arguably lower than international standards, is unreasonable, and will not therefore lead to any change in the status quo.

The changes suggested by Animals Australia (page 1 and 2 above) are not highly expensive, yet would significantly improve welfare outcomes for the 700,000 unwanted bobby calves sent to slaughter each year. The current proposed 30h TOF Standard does not do that (as outlined above).

The dairy industry is said to be Australia’s third largest rural industry with direct employment of 40,000 people and annual production values of \$18.9 billion and in our strong view can ‘afford’ these modest changes.

	Dairy trade \$	Bobby calf trade \$	% of dairy trade
Farm gate	4,000,000,000	40,000,000	1.0
Wholesale	12,000,000,000	75,750,000	0.6
Export	2,900,000,000	87,000,000	3.0
Total	18,900,000,000	202,750,000	1.1

As illustrated above, the bobby calf trade is a mere 1.1% of that value, but given the community concern about this issue it is quite likely the bobby calf handling issue will bring the industry into disrepute unless its standards are raised.

As bobby calves are currently given minimal care in their short life – i.e. most receiving only one feed a day, any additional care/feeding regime will require some minimal additional expenditure. This could easily be covered by industry if there was a will to do so. For example, the cost of feeding a calf while being transported (at saleyards or more likely at abattoirs) is estimated to be \$4 per calf (p55). This represents a cost of \$2,768,000 per annum (692,000 bobby calves x \$4 = \$2,768,000), which is 1% of the value of the bobby calf trade or 0.014% of the entire dairy trade. Even this is likely to be an over-estimate given that with the prospects of required feeding, it is likely arrangements will be made so that many calves can be slaughtered on the day they leave the farm to avoid that requirement.

For a broad public view we could extrapolate this extra cost in terms of milk production; each year 9,023 million litres of milk are produced and so the additional cost of one feed to a bobby calf enroute to slaughter would be \$0.00031 per litre of milk. Using a similar calculation, the extra cost of ensuring all calves were fed twice a day on farm (rather than once) in the days prior to slaughter would be an additional mere \$0.00155 per litre of milk – still much less than a cent a litre.

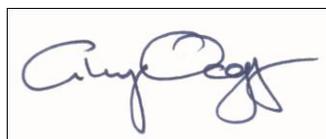
What is regrettably clear from the information provided in the RIS is that if this new 30h TOF Standard is adopted, most calves will still continue to be held overnight in inadequate abattoir holding yards without bedding or food (often cold and always hungry), awaiting slaughter the next day. This is a very different reality than the image provided by a full reading of the relevant current national and State Codes or industry and government websites. It is little wonder therefore that the community is surprised (even shocked) when actual industry practice is made public as it has been during this consultation.

I urge the decision makers in this process to:

- Reject Option B (30h TOF),
- As a minimum, adopt Option D (18h TOF) and,
- Reconsider the Codes/Standards review process which is not effectively achieving the stated goals of developing 'reasonable' animal welfare standards.

Please contact me if further information or clarification of this submission would be of assistance.

Yours sincerely,



Glenys Oogjes
Executive Director
Animals Australia
37 O'Connell Street
North Melbourne 3051
(03) 9329 6333
www.AnimalsAustralia.org

ⁱ Fisher A, Mansell P, Stevens B, Conley M, Jongman E, Lauber M, Hides S (2010). Determining a suitable time off feed of bobby calf transport under Australian conditions. Dairy Australia Project no. TIG 124, May 2010

ⁱⁱ The Primary Industries Ministerial Council – consisting of the federal and State/Territory agriculture ministers - which endorse the Standard and guidelines for farm animals.

ⁱⁱⁱ Mazur and Bolton, Envision Environmental Consulting (2008) analysis of the public consultation for the Land transport of Livestock Standards and Guidelines.

^{iv} <http://www.animalwelfarestandards.net.au/>

^v <http://www.animalwelfare.net.au/research/download/AWCAnimalWelfareIssues.pdf>

^{vi} TNS Social Research Consultants, 2006. 'Attitudes Towards Animal Welfare'. Commissioned by the Department of Agriculture, Fisheries and Forestry as part of the 'Australian Animal Welfare Strategy'

^{vii} Fisher A, Mansell P, Stevens B, Conley M, Jongman E, Lauber M, Hides S (2010). Determining a suitable time off feed of bobby calf transport under Australian conditions. Dairy Australia Project no. TIG 124, May 2010.

^{viii} (Extract from the AWSC Animals Welfare Reference Document – Dairy Production (DPI Vic/Dairy Australia February 2006)

^{ix} Referenced to Phillips, C.J.C. 2010. *Principles of Cattle Production*. Second Edition. 233 pp. CAB International, Wallingford).

^x Dr Sue Hides (veterinarian, dairy farmer and former Victorian DPI Senior district Veterinarian, Churchill Fellow) produced a DPI DVD on "Calf Management - the first week of life" and states "Two feeds per day is preferable for the first week of life."

^{xi} Todd et al (2000) *Effects of food withdrawal and transport on 5- to 10-day-old calves*. Research in Veterinary Science 68: 125-134.

^{xii} Edge, M (2008) A review of bobby calf welfare during transport. Report for the Australian Meat Industry Council.

^{xiii} Poultry welfare: science or subjectivity? Duncan I.J.H. British Poultry Science, 43, Number 5, 1 December 2002, pp. 643-652(10)

^{xiv} Cave, J, Callinan, A and Woonton, W (2005). Mortalities in bobby calves associated with long distance transport. *Australian Veterinary Journal*, 83, Nos 1 & 2: 82-84