4 August 2017

National Transport Commission Draft Load Restraint Guide 2017 Submission

The Australian Forest Contractors Association (AFCA) is the national peak body representing Forestry Contracting Business who work within the harvest, haulage and silviculture sectors. One of AFCA's objectives is to work with industry to lead improvements in safety and to support a whole of industry approach to improved safety outcomes.

AFCA welcomes the opportunity to provide comment on the National Transport Commissions Draft Load Restraint Guide 2017(Draft LRG) and provides the following for your consideration. The comments provided follow brief consultation with stakeholders across industry who have participated a range of safety initiatives and projects with respect to haulage and log transportation.

Registered Codes of Practice

AFCA is working with the Australian Forest Products Association (the peak national body representing the Forest and Forest Products industry) on the development of a national Forestry Log Haulage Registered Code of Practice (LHRCoP). This follows extensive consultation with the National Heavy Vehicle Regulator and support for a specific code relating to log transportation. The LHRCoP has competed the NHVR's Notice of Intent process and has now moved into the development phase.

The LHRCoP will specifically address log transportation in the context of demonstrating compliance with the Heavy Vehicle National Law. The scope of the project will include consideration of load restraint given the unique and specific challenges relating to this for log transportation.

The current Draft LRG contains specific guidance regarding log restraint which, in time, may be at odds with the final 'best practice' solutions included within the LHRCoP. The LHRCoP is expected to be complete by July 2018 and whilst adoption by businesses is voluntary, industry is committed to safety improvements and best practice. If the LRG is at odds with the LHRCoP then this will cause unnecessary confusion and is undesirable, therefore consideration should be given to the mechanisms for review of the Draft LRG where sections of it become outdated based on new research or policy development.

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Load Restraint Research

Moreover, there has been significant resources and investment spent within the forestry industry to improve its understanding of the conditions which cause log movement and solutions which improve load restraint outcomes.

This work has been ongoing for some time and has resulted in findings which have led to the use of chains rather than webbing in some instances, other restraint material and methods are is still being tested and may result in other feasible solutions to improve load restraint. It is expected that this work, as it continues, will inform the LHRCoP. The challenge for the forest industry is the diversity of logs being transported including consideration of species, seasonal conditions and length as well as truck configurations, this has been found to create a very complex environment for load restraint. It is expected that additional research may be required to improve understanding of some of these complexities and that a 'one size fits all approach' will not result in outcomes that support compliance with load restraint in all instances. The industry has briefed the NHVR on the progress of this works and expect to use the results of this testing to inform a national series of training workshops that the NHVR has funded.

The above challenges should be recognised with respect to the performance based measures included within the Draft LRG.

Draft LRG Contents

With respect to the current content contained in the Draft LRG please find below specific comments:

- It is understood the Draft LRG is both a **guide** to the legal requirements and provides performance based standards to identify suitable load restraint systems for loads. Accordingly, the document should clarify and make clear which are the legal requirements, where referenced throughout the document and those that provide guidance. It is reasonable to expect that the word 'must' indicates that legal requirements exist which must be complied with. Where this term is used, the legal source of this obligation should be listed within the document. It is recommended that the DRAFT LRG be reviewed and consideration given to the using of the word 'must' where it is a legal requirement, 'should' for matters that are recommended and 'may' for consideration.

- Of concern is the pre-tension requirements listed on Pages 21 and 209. The Performance Standards (p224) state that *'…the load must be capable of withstanding the forces that would result if the laden vehicle were subjected to the following separately….*', and then it lists the various g forces including 0.2g in the vertical direction. These are the international standards that form the basis of the guide. The guide then indicates (pages 21 and 209) that *'the tie down lashings must be pre-tensioned to provide a minimum clamping force of 20% of the weight of the load'*.

Our interpretation is that the Draft LRG has gone beyond the international standard with the apparent intent to cover the circumstances where a load may work its way towards the rear of the truck as it bounces along the road. Moreover, using the word 'must' implies that there is a legal obligation to have 20% pre-tension, when the only legally binding part of the guide is the Performance Standards. Having significant pre-tension may well be good practice, but the current wording suggests that 20% is a requirement of the Performance Standard, when it is not. The engineering advice that the forest industry has received indicates that 20% pre-tension is not necessary for logs which are also restrained with vertical stanchions.

- *"Ensure the stanchions are strong enough to restrain the whole load sideways" (pg 130).* Remove the word 'whole', as it implies they need to be stronger than need be. The Performance Standard requires these to be able to withstand a force of 50% of the load's weight.

- *"Check that all log lengths extend at least 300mm beyond the outer stanchions in the forwards and rearwards directions" (pg 130).* Whilst an overhang of 300mm is good practice it cannot always be achieved, for example in preservation operations in Queensland. This statement should be deleted or replaced with '*check that all log lengths extend beyond the outer stanchions in the forwards and rearwards directions where lashing restraints may not be sufficient to restrain logs under emergency braking'*.

- *"Blocking systems should not stop the trailer and/or stanchions from folding*" (pg 130) delete comment as it does not make sense.

- Reword Figure 334 Crown Loads "*load crowns so that half the diameter of log is level with the bolster at centre"* (pg 131).

- "*Tension both sides when using webbing straps*" (pg 131). This comment should be deleted or replaced with '*Ensure there is adequate tension on both sides when using webbing straps'.*

- Page 158 suggests that synthetic ropes have low strength and cannot be tensioned sufficiently to restrain heavy loads is inconsistent with forestry industry findings and does not recognise current available products. Dyneema (UHMWPE, Ultra High Molecular Weight Polyethylene) is approximately, size for size, as strong as high tensile chain while only being 15% of the weight, with similar or lower stretch (less than 2% at breaking point). The Forest Industry recently has trialed the use of Dyneema and has been found it to be more effective in transferring higher tensions across the load than either chain or polyester webbing when using the same winches. Research is continuing in this space and is expected to inform the FLHRCoP.

We trust this information is useful feedback towards finalising the Load Restraint Guide. Should you wish to discuss any of the comments outlined in this submission please contact Stacey Gardiner, General Manager on 0419 328 093 or email stacey@afca.asn.au