

INQUIRY INTO HEAVY VEHICLE SAFETY AND USE OF TECHNOLOGY TO IMPROVE ROAD SAFETY

Organisation: Cement Concrete & Aggregates Australia
Name: Ms Monique Andrew
Position: State Director NSW
Date Received: 23 February 2018

23 February 2018

StaySafe Parliamentary Committee
Parliament House
Sydney NSW 2000

Dear Sir/Madam

SUBMISSION: INQUIRY INTO HEAVY VEHICLE SAFETY AND USE OF TECHNOLOGY TO IMPROVE ROAD SAFETY

Cement Concrete & Aggregates Australia (CCAA) is the peak industry body representing the heavy construction materials industry in New South Wales and throughout Australia. CCAA members operate cement manufacturing and distribution facilities, concrete batching plants, hard rock quarries and sand and gravel extraction operations throughout the nation.

Our members account for 90% of total industry output, which contributes around \$12 billion to Gross Domestic Product, employing 18,000 Australians directly and supporting the employment of a further 80,000 people. Heavy construction materials play a vital role in delivering the infrastructure required to support population and economic growth in NSW. Without materials such as sand, gravel, rock, concrete, and cement we would not have our roads, railways, bridges, airports, homes or hospitals.

Heavy construction materials are characterised as high bulk, low value commodities with our members operating across the complete supply chain; from the point of extraction right through to delivery of materials to the end consumer. Our members have large logistics operations, contributing 32% of road freight by weight in NSW.¹ They operate a fleet of some 6,500 concrete agitators, 2,500 quarry truck and dogs, and 1,200 cement tankers nationally. Given our members operate heavy vehicles across the State, the industry takes its responsibility for safety seriously.

CCAA welcomes the opportunity to make a submission to the StaySafe Joint Parliamentary Committee's *Inquiry into Heavy Vehicle Safety and Use of Technology to Improve Road Safety*.

PRIORITY ISSUES

a. Regulation

The heavy vehicle industry is highly regulated, with stringent regulations regarding safety. These regulations help to ensure that heavy vehicles operate safely, and positively contribute towards the NSW Government's target of achieving zero road fatalities.

CCAA, on behalf of the industry, often meets with government agencies such as Transport for NSW (TfNSW) and Roads and Maritime Services (RMS), to ensure regulations are sensibly and practically developed and implemented. We believe that government regulation is most effective when created in collaboration with industry to ensure the outcomes are realistic, feasible and targeted.

¹ Based on data in the *Australia Bureau of Statistics: Road Freight Movement 2014*.

CCAA supports the role of the National Heavy Vehicle Regulator (NHVR) in providing a nationally consistent approach to how industry is regulated. It is important that NSW continues to follow this approach, so that we do not have inconsistent regulations introduced at a state level.

The NHVR has a strong focus on safety, with programs on heavy vehicle standards, accreditation and data collection. The NHVR have also updated the Chain of Responsibility obligations for heavy vehicles, covering fatigue management, load dimension and restraint, speeding, and transport of dangerous goods. The changes to these obligations are designed to ensure that everyone in the supply chain shares equal responsibility for heavy vehicle safety.

b. Industry and Government Cooperation

Our members are increasingly using technology and innovative design to improve safety and prevent road accidents. We are beginning to see these in newer model vehicles, with integrated safety technologies such as lane departure warning systems, electronic stability control, and automatic emergency braking systems.

In order for these technologies to be embraced by the heavy vehicle industry they must be practical, cost effective, applicable to the vehicle configuration, and where necessary phased in over time. Working alongside and drawing on the expertise of industry will ensure that these objectives are met and that any proposed technological solutions are readily adopted by industry.

Recommendation 1:

TfNSW to develop a Heavy Vehicle Safety and Technology Forum drawing on the expertise of the heavy vehicle industry and manufactures to identify and inform safety solutions for heavy vehicles.

Through the Sydney Metro project, TfNSW has introduced contractual safety requirements for heavy vehicles known as the Heavy Vehicle Safety Equipment Requirements. These Requirements include heavy vehicle features such as side underrun guards to protect pedestrians, improved mirrors to eliminate blind spots, telematics systems to track movements, vehicle warning signage, and enhanced visibility markings.

The introduction of these contractual safety requirements has had the effect of lifting the safety of heavy vehicles servicing the Sydney Metro project without the need for additional regulation.

CCAA supports these requirements being extended to all NSW Government infrastructure projects, thereby providing a non-regulatory mechanism for raising the safety standard of heavy vehicles operating across NSW. CCAA recommends that this is achieved in consultation with the industry to ensure measures are practical for various vehicle configurations, and that any mandated requirements be consistent across all projects.

Recommendation 2:

Consult with industry on a proposal to expand the Sydney Metro Heavy Vehicle Safety Equipment Requirements to apply to all NSW Government infrastructure projects.

In 2016, RMS introduced the Safety, Productivity & Environment Construction Transport Scheme (SPECTS). SPECTS is a voluntary scheme designed to enable the efficient movement of construction materials to support the growth of the greater Newcastle-Sydney-Wollongong areas by allowing enrolled trucks to carry more materials, and have greater road access, in return for meeting higher environmental, safety and compliance standards. Eligible vehicles must have a minimum of Euro 5

engine, enrolment in the Intelligent Access Program (IAP), On Board Mass (OBM) linked to the IAP, and additional safety features such as:

- Electronic Stability Control (ESC)²;
- Roll-over control system on trailer²;
- Systems to improve visibility and detection of vulnerable road users, such as blind spot mirrors;
- Reversing lights on both truck and trailer;
- Enhanced vehicle visibility markings;
- “Smart” reversing alarm, which adjusts the noise level to be appropriate for the environment that the vehicle operates.

Uptake of the SPECTS and its corresponding safety benefits has been hampered by the fact IAP data is not shared with companies. IAP utilises satellite-based tracking technology to provide assurances that heavy vehicles are operating on approved roads and according to dimension and mass requirements. Records of non-compliance are sent directly to RMS, who can access this data in the event of an investigation.

There can be a significant lag between companies being notified by RMS (if at all) of any non-compliance. This lack of information sharing can lead to drivers being unaware of repeated breaches, increasing the risk of an incident. As an alternative to IAP, heavy vehicle operators have chosen to use their own telematics systems, but these are difficult to keep up-to-date and do not provide the added level of assurance back to the regulator.

Recommendation 3:

Data collected by RMS through the Intelligent Access Program (IAP) should be shared with companies in real time, to allow industry to proactively respond to issues of non-compliance and provide greater incentives for the uptake of SPECTS.

c. Industry Led Safety Initiatives

Road safety is the shared responsibility of all road users and is taken very seriously by our industry. Our members invest a lot of time and resources into ensuring their vehicles and drivers abide by the highest standards of safety on our roads. As the industry peak body, we work in collaboration with industry to further this objective.

In 2016, CCAA launched the Agitator Rollover Prevention eLearning Course. This course is designed to provide heavy vehicle drivers who operate concrete agitators with an understanding of what a rollover is, how it can occur, and most importantly, what can be done to prevent it. The Course was developed in response to a gap identified by our members, who were concerned that not enough emphasis was being placed on rollover prevention in heavy vehicle driver education and training.

The industry is also encouraged to adopt best practice through the annual CCAA Innovation Awards comprising of three categories, Health & Safety Innovation, Environmental Innovation, and Community Leadership. 2018 marks the 40th occasion that awards of this kind have been presented in NSW, a testament to their importance in sharing ideas to improve industry outcomes.

In 2017 Boral Australia won the NSW Health and Safety Award for its 10 x 4 agitator truck with improved roll stability. Cross-industry collaboration between Boral and a heavy vehicle

² On vehicles manufactured on or after 1 January 2017 as defined in the SPECTS Business Rules.

manufacturer resulted in design improvements being made to the agitator truck that significantly improved roll stability. Key design upgrades included, a much thicker and stiffer truck chassis, a more robust suspension system with a 22% increase in roll stiffness, deletion of the transit mixer sub-frame and lowering of the bowl, lower profile tyres and a new approach to attaching the mixer to the truck. These innovations have lowered the centre of gravity by 150mm and resulted in measurable improvements in roll stability.

CCAA members also provide road safety education programs to local high schools surrounding their quarry sites. The aims of these programs are to save lives and keep everyone safe on the roads by learning about heavy vehicles. The program educates young people about the specific safety risks associated with heavy vehicles and provides practical information on minimising those risks. Following a presentation in the classroom, students are able to sit in a heavy vehicle to get first-hand understanding of the driver's point of view. One of the most effective parts of this presentation is being able to show students the extent of blind spots in a heavy vehicle, by placing a light vehicle and vulnerable road users in blind spots, while students sit in the driver's seat.

Recommendation 4:

Establish a grants scheme similar to TfNSW's Community Road Safety Grants, to allow participants in the heavy vehicle industry to access funding that encourages investment in safety technology, education and awareness.

d. Education and Licensing

CCAA members remain concerned that members of the public are not sufficiently educated on the risks associated with interacting with heavy vehicles on our roads.

Heavy vehicles make up only 2.4% of NSW motor vehicle registrations and 8.3% of kilometres travelled by all NSW vehicles, but are involved in about 17% of all road fatalities.³ Although often not at fault, the size and mass of heavy vehicles make any crash a serious one. Alarming, 2015 accident figures from National Truck Accident Research Centre (NTARC) show that in fatal collisions involving a heavy vehicle and a third party car, the third party was at fault on 93% of the time.⁴ In this report, the NTARC suggests there is a role for agencies and media, when quoting road toll statistics for 'fatalities involving heavy vehicles', to incorporate an 'at fault' statistic, otherwise the perception will always be that the truck was at fault.

CCAA believes that educating young people about sharing the road with heavy vehicles before they receive their drivers licence ensures the greatest safety outcomes for individuals and the community. CCAA has identified a need to review the truck related sections of the NSW Road User Handbook. Equally, targeted questions in the Driver Knowledge Test and Hazard Perception Test are other ways to ensure that light vehicle drivers can understand the specific needs of heavy vehicles.

Recommendation 5:

TfNSW to consider incorporating light vehicle education into the Road Safety Plan 2021, and prioritise the review of the NSW Road User Handbook to strengthen guidance on sharing the road with heavy vehicles.

³ Transport for NSW Centre for Road Safety, Webpage – Staying Safe: Heavy Vehicle Safety, last updated 24 August 2016. <http://roadsafety.transport.nsw.gov.au/stayingsafe/heavy-vehicles/index.html>

⁴ National Truck Accident Research Centre, 2017 Major Accident Investigation Report – For major accidents in 2015, p.12, https://www.nti.com.au/files/files/20147_NTARC_Report/C666_NTI_2017_Accident_Investigation_Report_LR_2.pdf

In recognising that all road users have a role to play in respect to the safety of NSW roads, CCAA members have identified that heavy vehicle licensing standards could also be strengthened.

CCAA members have noted a decreasing quality of newly licensed heavy vehicle drivers. In response, many of our members have had to provide additional training and induction before allowing new drivers to operate company vehicles unsupervised. This has increased the cost of doing business, as the industry is subsidising inadequate training during licencing.

There is concern within the industry that newly licensed drivers are not adequately trained in matters such as fatigue management, log book reporting, load limits and general defensive driving techniques for heavy vehicles. Anecdotally, CCAA members have heard that accredited licensing providers are also cutting corners to push more drivers through the course.

Recommendation 6:

To ensure the heavy vehicle licensing system is delivering quality heavy vehicle driver, CCAA recommends that RMS consider a review of the driver licensing requirements for heavy vehicles, as well as undertaking an audit of accredited training providers.

NEXT STEPS

The heavy construction materials industry operates in a highly complex regulatory and legislative environment. The industry takes its responsibility seriously, and is committed to continue developing training and implementing technology that provide the highest level of safety on the road.

CCAA would welcome the opportunity to discuss our experiences and recommendations with the Committee.

Yours sincerely



MONIQUE ANDREW
State Director NSW
CEMENT CONCRETE & AGGREGATES AUSTRALIA