

TASMANIAN AGRICULTURAL AND HORTICULTURAL RICP

A registered Industry Code of
Practice under Section 706 of the
Heavy Vehicle National Law





INTRODUCTION	3
Purpose	3
Scope	3
Codes of Practice and the Heavy Vehicle National Law	4
Who is a party in the CoR?	4
What is the Primary Duty?	4
What does “Reasonably Practicable” mean?	5
What is Executive Due Diligence?	5
HOW TO USE THIS CODE OF PRACTICE	6
Implementing Risk Management – AS/NZS ISO 31000:2018	6
Identify and assess your risks	6
Select and Apply the Control Measures	6
CONTEXT	7
Environment	7
Responsibility	7
Identified Key Risks	9
FATIGUE	10
Introduction	10
Drivers of Fatigue Regulated Heavy Vehicles	10
Compliance vs Risk Management	10
Drivers of vehicles up to 12t	10
1 Risk: The driver of a heavy vehicle is impaired by fatigue and loses control of the vehicle, causing a collision and injury to the driver or others and damage to property or the environment.	10
VEHICLE MAINTENANCE AND ROADWORTHINESS	13
Introduction	13
Resources	13
2 Risk: A poorly maintained or unroadworthy vehicle presents the risk of a collision, causing death or injury to the driver or other road users.	13
MASS MANAGEMENT	15
Introduction	15
Resources	15
3 Risk: An over mass vehicle can be difficult to control and could cause a collision, causing injury to other road users, damage to other vehicles and damage to road infrastructure.	15
4 Risk: Extra trips are made to transport the same number of potatoes, increasing the overall risk to road users because of increased vehicle movements.	16
LOAD RESTRAINT AND DIMENSION	16
Introduction	16
Resources	16
5 Risk: Falling potatoes impact other road users and contaminate the roadside environment.	17
6 Risk: An over-dimension load could cause a collision and cause injuries to the driver and others, or damage to infrastructure.	17
7 Risk: An improperly restrained load could fall from a heavy vehicle, cause a collision and cause injuries to the driver and others, or damage to infrastructure.	17
SAFE ACCESS AND LOADING	18
Introduction	18
Resources	18
8 Risk: A heavy vehicle rolls or loses control, which causes injuries to the driver and others and may damage vehicles, property, and infrastructure.	18
KEY TERMS AND DEFINITIONS	19
CODE ADMINISTRATION	20

FOREWORD

This Registered Industry Code of Practice (RICP) was developed in accordance with guidelines for the development and registration of industry codes or practice¹ published by the National Heavy Vehicle Regulator (NHVR) under section 706 of the *Heavy Vehicle National Law* (HVNL). This code was assessed as qualifying for registration by the NHVR.

An industry code of practice provides practical guidance for achieving the standards of heavy vehicle safety and compliance required under the HVNL. An RICP is relevant to any person or business that has a duty under the HVNL, because they are a party in the Chain of Responsibility (CoR) for a heavy vehicle, or because they are an executive of a business that is a party in the CoR.

This Code was developed by the Tasmanian Farmers and Graziers Association (TFGA), the peak body representing the interests of Tasmanian farmers at a state and national level. The content of the Code is based on consultation with a wide range of industry participants through various consultation arrangements.

A draft of this Code of Practice was released for public consultation on 13 May 2022 and was endorsed by the NHVR for registration 30 June 2022.

INTRODUCTION

Purpose

People and businesses in the Tasmanian agricultural and horticultural sector have duties under the HVNL if they send, receive, or transport goods or produce using heavy vehicles. The HVNL defines them as “parties in the Chain of Responsibility” and gives them a duty – the primary duty – to do what is reasonably practicable to ensure the safety of their transport activities.

Put simply, the primary duty requires a party to apply risk management to its operations so as to eliminate or minimise the risks to public safety that arise from its transport activities.

The Tasmanian Agricultural and Horticultural RICP (TAH Code) supports risk management by highlighting the specific hazards and risks around heavy vehicle use in the agricultural and horticultural industry and by identifying measures that can be used to eliminate or minimise those risks.

The TAH Code does not propose a “one size fits all” solution that every participant in the industry must use. This is because each business has different resources and constraints and a different risk profile. Instead, the code proposes a range of control measures that could be adopted. Each business should select and apply the measures that suit their circumstances and that will eliminate or minimise public risks to the appropriate level.

Apart from improving safety, the TAH Code may also promote consistency in the way that tasks are carried out. If businesses share an understanding of risks and the best ways to eliminate or minimise them, they can coordinate better when they work with each other by using common terminology and aligning systems, processes, and equipment.

Scope

The TAH Code is relevant to all parties in the agricultural and horticultural supply chain in Tasmania. For example, it is relevant to the meat, wool, dairy, vegetable, grain, and horticulture sectors. It is equally relevant to any other agricultural or horticultural enterprise.

As noted above, the TAH Code assists users to comply with their primary duty, which is an overarching safety duty (Chapter 1A, HVNL). It focuses on aspects of heavy vehicle safety that are the subject of specific regulation within the HVNL, including:

- driver fatigue (Chapter 6, HVNL)
- mass, dimension and loading (Chapter 4, HVNL)
- vehicle standards (Chapter 3, HVNL)

and upon some safety risks that are not dealt with directly by the HVNL, for example:

- safe access and loading

Note: the primary duty to ensure safety extends to other matters that are not specifically regulated by the HVNL. These include fitness to drive, driver distraction, training, drugs and alcohol and any other matter that would have the effect of impacting public safety. Some of these topics are covered by other publications, guidance and codes of practice.

The TAH Code does not cover every risk to do with heavy vehicle use in agriculture and horticulture. Therefore, a person using this code also needs to refer to the Master Industry Code of Practice (Master Code), for guidance on topics not covered in the TAH Code.

¹ www.nhvr.gov.au/files/202202-0460-guidelines-for-industry-codes-of-practice.pdf

The Master Code is a general code written for the whole of the heavy vehicle industry. Where a topic covered by the TAH Code overlaps with content in the Master Code, the TAH may refer to relevant content in the Master Code, however it is up to the person using the TAH Code to satisfy themselves that they have considered all the guidance that is relevant to their situation.

Codes of Practice and the Heavy Vehicle National Law

A code of practice is best understood as a tool that helps parties in the CoR to comply with their primary duty. By assessing whether the hazards and risks are present in their business, and adopting recommended controls that suit their circumstances, CoR parties can protect themselves, their employees, and the public from harm, and prevent damage to property, infrastructure, and the environment. Those controls may also protect the party from prosecution for a breach of the primary duty (s26C, HVNL).

Whether or not your business adopts the controls recommended by a code of practice, if you are a party in the CoR, the contents of a code registered under s706 of the HVNL are relevant. If you or your business were charged with breaching the primary duty, a court would use the contents of a registered code as evidence of what you knew or ought to have known about the hazards and risks associated with your industry and about the control measures that could be used to eliminate or minimise those risks. The court would also consider which of those control measures it would have been reasonably practicable for your business to have implemented.

If your business had implemented a different set of controls to achieve the same safety outcome, a court would still have regard to the registered code as evidence of what your business knew or should have known about hazards and risks. It would also assess whether the level of safety that your system achieved was equivalent to or greater than the safety outcomes that would have been achieved using the controls recommended by the code. In the event of legal proceedings, there is a procedure to follow if you have used an alternative system rather than adopting recommendations from a registered code (s632A(5), HVNL).

Who is a party in the CoR?

A person or business is a “party in the Chain of Responsibility” when they perform any of these functions in relation to a heavy vehicle:

- employ a heavy vehicle driver (employer)
- engage someone to drive a heavy vehicle under a contract for services (prime contractor)
- direct the control and use of a heavy vehicle (operator)
- schedule the transport of goods and passengers in a heavy vehicle, or schedule a driver’s work and rest hours (scheduler)
- consign goods for transport by a heavy vehicle (consignor)
- receive goods delivered by a heavy vehicle (consignee)
- pack or assemble goods for transport in a heavy vehicle (packer)
- manage premises where five or more heavy vehicles are loaded or unloaded each day (loading manager)
- load a heavy vehicle (loader)
- unload a heavy vehicle (unloader)

Individual employees are parties in the CoR, but so are the businesses that employ them. Because employers generally have more control over work practices, training and resources, they are expected to take the lead in carrying out the primary duty.

For more information about the parties in the CoR see: www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/the-primary-duty/parties-in-the-cor

What is the Primary Duty?

A party in the CoR has a duty to ensure the safety of its transport activities so far as reasonably practicable. This is referred to as the “primary duty” and is similar to the general duty that applies to employers (and others) under work health and safety laws. The primary duty requires CoR parties to ensure safety by managing public risks to do with heavy vehicles to the extent of their influence and control.

Note: A heavy vehicle is a vehicle with a gross vehicle mass (GVM) of more than 4.5 tonnes. For more information about the definition of a heavy vehicle see section 6, HVNL².

The primary duty relates to each party’s “transport activities”, which includes all the activities that are associated with the use of a heavy vehicle on a road. For example, it includes business processes, safety systems and decision making, as well as the activities normally associated with the transport and logistics sector such as training, scheduling, route planning, managing premises, vehicle maintenance, packing, and loading.

In order to ensure safety, you are required to eliminate public risks associated with all your transport activities, and to the extent it is not reasonably practicable to eliminate those public risks, to minimise them.

The best way to comply with this duty is to identify and assess the risks to public safety that arise from your transport activities, and to implement controls that will eliminate or minimise those risks. This code of practice will assist you to do both those things.

Note: Under the HVNL, “public risk” means risks to drivers, passengers, other road users and members of the public in the vicinity of roads and public places. It also includes the risk of damage to property, including vehicles and loads, damage to road infrastructure and harm to the environment.

Duty not to encourage breaches of the law

The primary duty also requires a party in the CoR to avoid creating incentives for other parties and drivers to breach the laws. For example, this might take the form of a monetary reward for arriving early or a penalty for arriving late; or it might be preferential treatment for sub-contractors who cut corners or who will accept loads that are heavier than authorised.

The HVNL states that a CoR party must ensure that their conduct does not directly or indirectly cause or encourage:

- a driver to breach the HVNL
- a driver to exceed a speed limit
- another person – including another party in the CoR – to breach the HVNL (s26C(2)(b), HVNL).

² www.legislation.qld.gov.au/view/pdf/inforce/current/act-2012-hvnlq

What does “Reasonably Practicable” mean?

“So far as is reasonably practicable” is the standard for how far you have to go to eliminate or minimise a risk. Put simply, it means that you must take every measure that you know of, that is effective and possible to do, and that is not overly costly compared to the degree of risk.

You will have to make this assessment yourself, by putting yourself in the position of a hypothetical reasonable person, and asking whether that person would think you had done enough to manage risk, taking account of:

- the degree of risk, and the degree of harm that the risk could cause
- what you know or ought to know about hazards, risks, and controls
- whether control measures are suitable and available, and
- whether the cost of implementing measures is proportionate to the degree of risk

These are the same factors that a court would consider if a business or executive were charged in relation to a breach of the primary duty.

Knowledge of risks and controls

You aren’t expected to control risks that you don’t know about or couldn’t be expected to know about, and you aren’t expected to use control measures that no one in your industry has heard of. But if there are well known risks and control measures that you don’t implement, then you may be failing in your duty.

Proving what a person knows or ought to know can be complicated, but information included in this code of practice will be regarded by a court as information about hazards, risks, and controls that everyone in the relevant industry knows or ought to know (s632A, HVNL).

You aren’t obliged to implement any or all of the recommendations in this code but if you don’t know its contents you are at a disadvantage. You won’t know safety information that your industry has agreed is relevant, and that a court would expect you to know. You might also overlook a control measure that is in fact quite effective and relatively inexpensive to implement.

Availability and suitability

You are not required to implement control measures recommended in this code if they aren’t available or aren’t suitable for your situation. For example: a tool that is not available in Australia; equipment that has not been adapted to your operations; practical training that’s only available at a remote location.

A control measure that introduces new risks or that won’t always work would not be suitable. For example: new equipment that causes complacency about other safety procedures, leading to new risks; training that is ineffective because of high staff turnover; a procedure that isn’t flexible enough for each of the working methods used in your business.

Where a recommended control measure is not available or suitable, you are still required to find other ways to eliminate or minimise the risk.

Relative cost of control measures

You are not required to implement recommended measures if their cost would be grossly disproportionate to the risk. You must use judgement to determine what would be proportionate, taking account of all the circumstances. You can’t conclude that the cost is disproportionate based on personal opinion or preference. The conclusion must be one that would also be reached by another reasonable person, in the same position, and with the same information as you.

It is difficult to anticipate what measures and what cost courts would hold to be reasonable in a given situation. The best approach may be to assume that where overall risks are high, no price is too great to protect the safety of employees or the public.

Note: In some situations, the risk that an activity creates may be so severe that there are simply no measures that can eliminate the risk or minimise it to an acceptable level. In that situation, you will have to stop performing the activity altogether, or find a safer way to achieve the same outcome.

What is Executive Due Diligence?

If you are an executive of a business that has a primary duty you must exercise due diligence to ensure that the business complies with its primary duty. Failing to do this could expose you to a charge against section 26D of the HVNL.

The term “executive” includes an executive officer, a manager or another person who takes part in the management of a business. It also includes a director of a company and a partner in a partnership.

Exercising due diligence means to:

- acquire and maintain knowledge about conducting transport activities safely
- understand the nature of the business’ transport activities, including the hazards and risks associated with those activities
- ensure the business has and uses the resources required to eliminate or minimise the hazards and risks created by its transport activities
- ensure the business has and implements processes to eliminate or minimise the hazards and risks created by its transport activities and that information about hazards, risks and incidents is received, considered, and responded to in a timely way.

This means that if a code of practice is relevant to your business’s activities, as an executive, you have a duty at the very least to familiarise yourself with the contents of this code. You can also use the code to develop the safety systems necessary for the business to meet its primary duty obligations.

HOW TO USE THIS CODE OF PRACTICE

This code will help you identify the hazards and risks in the agricultural and horticultural industry, provide insights about the likelihood and consequences of those risks, and propose measures to control the risks. Even if you are familiar with the hazards and risks described in the code, the controls might be new or different from the controls you currently have in place.

The TAH Code should be used in your business to establish your own risk management system. You are the person with the best knowledge of the circumstances in which your business operates, so you should use the TAH Code to work out what is reasonably practicable for your business to do to eliminate or minimise those risks.

In order to ensure your system remains current, you should revisit the TAH Code when your situation or activities change, or when new risks associated with your transport activities emerge.

The information contained in the TAH Code is also a resource you can use to develop training for your employees and to assess the adequacy of training provided to business partners or sub-contractors.

Before you develop contracts with other parties about how a transport activity will be undertaken, consider how to implement suitable measures from the TAH Code and agree on which particular actions each party will perform. When you are establishing assurance processes to measure the performance of parties against a contract, the TAH Code may also be a useful reference.

Implementing Risk Management – AS/NZS ISO 31000:2018

It is recommended that you use this code in developing a risk management system for your business that complies with the *AS/NZS ISO 31000:2018 Risk Management – Guidelines*. Depending upon the size of your business, this process may be relatively straightforward, or might take many months to fully implement. More information about risk management is available on the Safework website (e.g. www.safeworkaustralia.gov.au/resources-and-publications/model-codes-practice/model-code-practice-how-manage-work-health-and-safety-risks).

Key components of risk management are:

1. Identify hazards – find out what could cause harm.
2. Assess risks – understand the nature of the harm that could be caused by the hazard, how serious the harm could be and the likelihood of it happening. This step may not be necessary if you are dealing with a known risk with known controls.
3. Control risks – implement the most effective control measure that is reasonably practicable in the circumstances and ensure it remains effective over time.
4. Review hazards and control measures to ensure they are working as planned

This code will help you with steps 1 - 3 in that process.

It is recommended that you establish a safety management system (SMS) to implement step 4. There are numerous SMS resources such as templates, quick guides and toolbox talks on the NHVR website that can be tailored to suit a business's needs regardless of its size and complexity.

The 9 Step SMS Roadmap gives structured information and direction through each step of developing an effective SMS, implementing it with management and staff, and extracting safety improvements as part of its day-to-day use (www.nhvr.gov.au/safety-accreditation-compliance/safety-management-systems).

Identify and assess your risks

This code should help you identify the risks in your transport activities. You should also consider legislation and regulations, other registered codes of practice such as the Master Code, industry publications, guidance material from regulators and expert reports.

These resources, when combined with your own knowledge of your business, and what you can learn from employees and business partners should enable you to identify your risks.

Don't overlook the risks created when you interact with other parties, for example the risk that another business will use different processes or work to different standards. Also consider the risks to those other entities and their employees as part of your assessment of public risk.

Recommended practice is to document each of your identified risks in a risk register.

Once, you have identified all relevant risks, use this code and the resources mentioned above to help you assess each risk. Information about past performance of your business or industry will also be relevant in this process.

Assess the likelihood of each risk and the seriousness of the consequences if it does occur. Some people use a risk matrix to arrive at an overall risk level based on a combination of a rating for probability and a rating for consequence. This allows different kinds of risks to be compared on the same scale.

Note: Because of the size and speed of heavy vehicles, the consequences of a collision or rollover or loss of load will almost always be in the most serious category. Expect that the combined risk scores for many heavy vehicle risks will be high.

Once you have assessed each risk, look at the recommended control measures in this code to find the measure, or combination of measures, that will eliminate each risk so far as reasonably practicable. If a risk can't be eliminated, find the measure or measures that will minimise the harm or damage it could cause, so far as is reasonably practicable.

Select and Apply the Control Measures

You may have a choice of suitable control measures. You should favour the most effective and reliable controls.

In the field of work health and safety, there is a principle called the "hierarchy of controls" that recognises the most effective control is one that eliminates the risk altogether. The next most effective controls are ones that isolate the hazard from persons, that substitute a hazard with a safer alternative, or that rely on equipment or modifications to equipment or premises to control a risk (engineering controls).

"Administrative controls" are ones that rely on systems or procedures. If they are properly implemented, administrative controls can be highly effective, but they may need to be supported by continual monitoring and can fail if people aren't properly trained or motivated to use them all the time.



The final type of control is personal protective equipment (PPE) that can be effective at reducing the harm that an incident causes but does little or nothing to prevent the risk eventuating. In the event of a heavy vehicle collision or rollover, PPE is unlikely to be effective though it may afford protection in other less serious incidents.

You should implement the control measures that will be most effective in managing risk, giving priority to measures that eliminate risks altogether. Consider how effective each control will be in your circumstances.

In some situations, you may need to implement a combination of controls to manage the same risk or hazard.

Using other control measures

You are not restricted to using the control measures recommended in this code of practice. If there are other measures that are equally effective or more effective, it's perfectly acceptable to apply those measures instead of, or in addition to the ones that the code suggests.

If you did use different measures, then in the event of legal proceedings, you would have to give notice of the types of measures that you had used, in advance of any hearing. (See s632A(5) HVNL).

A registered code may not cover every possible hazard and risk. If one of your risks is not covered in a code, you still have to find a reasonably practicable way of eliminating or minimising that risk to an acceptable degree.

CONTEXT

Environment

Being an agricultural and horticultural operator/business ('farmer') isn't just an occupation, it can be a way of life. It brings with it an entire cultural identity, a set of behaviours and unique risks. Farms can operate seven days a week, 24 hours a day. Farmers are ingrained with a strong work ethic and a 'can do' attitude. During the harvest season, potential time pressures may give rise to unique risks in the agricultural and horticultural supply chain.³⁴

Agricultural and horticultural properties ('farms') vary in size and sophistication, from those with modern farming practices, infrastructure and equipment to those that have been handed down through the generations and may have older infrastructure and equipment. Some farms may be located in remote rural areas and may only be accessible by unsealed dirt roads. Loading can occur in the field and some farmers may make do with ageing equipment, including heavy vehicles.

It has been found in a report by Safe Work Australia (2018)⁵ that "some farmers [may] expect that contractors will take responsibility for their own safety, trusting that they have safer equipment and experience", and that "Farmers and contractors [can be] unwilling to make demands of the other when it comes to safety".

Combine all these factors and it can be seen the agricultural and horticultural supply chain brings with it a unique set of risks. Ensuring the safety of farm-related heavy vehicle transport activities requires controls tailored to the industry. That is why this Code has been developed.

Responsibility

When is a primary producer a party in the Chain of Responsibility?

The full list of CoR parties and their definitions is shown in Part 1.4.

As a primary producer, you are likely to be a Consignor or a Consignee because you send or receive goods using a heavy vehicle. If you or your employees pack produce onto pallets or into boxes then you are also a Packer. If your business loads or unloads goods or produce from a heavy vehicle then it is a Loader or Unloader. If you own a heavy vehicle and drive it yourself, or employ someone to drive it, then you are also an Operator.

In each case, you are a party in the CoR, and so is your business.

Most of your business partners will also be CoR parties too. A processing plant that unloads five or more heavy vehicles per day is a Loading Manager as well as a Consignee, and any business that controls drivers' working hours and routes is a Scheduler.

It's useful to understand the definitions of the CoR parties, so that you can work out whether you belong to any of them, but the most important thing is whether you are a CoR party, not which one you are. Each party has the same duty – to ensure so far as reasonably practicable, the safety of their transport activities related to the use of a heavy vehicle.

In most situations, there will be multiple parties whose activities are connected to the same heavy vehicle or vehicles. The CoR laws recognise this. They don't determine which of those parties

³ Farmsafe Australia, *Safer Farms 2020 / Agricultural Injury and Fatality – Trend Report*, p.6. Accessed at www.farmsafe.org.au

⁴ SafeWork Australia, *Insights Report: Exploring the experience of family farmers*, 24 Jul 2018, p.23. Accessed at www.safeworkaustralia.gov.au

⁵ Ibid, p.6

is responsible. A key principle of the CoR laws is that each of the parties shares responsibility and that each of them has a duty.⁶

How are primary producers' responsibilities shared?

Although the primary duty is shared, it is never reduced. Each party must still do what is reasonably practicable for them, based on the function they perform, the public risk created by the activity they perform, and their capacity to control, eliminate or minimise the risk.

Each party will have a different ability to influence and control the same risk and may need to do different things to discharge their responsibility.

As a rule, parties have control and influence over their own premises, vehicles, equipment and employees, but they can also affect overall safety, including how other parties behave, through communication, collaboration and negotiation.

Example of the capacity to influence and control

Three farmers transport their vegetables to the processing plant in town in different ways:

- Farmer A owns their own truck and gets a farm hand to drive it.
- Farmer B engages a transport operator with six permanent drivers.
- Farmer C engages an owner operator.

Vehicle safety

As the owner of the truck, Farmer A can inspect it at any time and send it for maintenance and repair when required. With access to the vehicle's manual and service records Farmer A knows when parts need replacing and when there is a noticeable change in the way the vehicle operates.

Farmer B and Farmer C can't look under the bonnet of the trucks that are transporting their produce, but if a vehicle is obviously defective, they may be able to rely on warranties in their contracts to refuse to load onto the vehicle, and to require a substitute vehicle to be provided instead. They should also be notifying the vehicle's driver and owner of any obvious defects.

All three farmers could let the processing plant know that they would like to be informed if there are any issues with vehicles or drivers transporting their produce.

Farmer A clearly has greater direct influence and control over the safety of the vehicle, but Farmers B and C also have influence upon the safety and roadworthiness of vehicles on the road, particularly if they have an ongoing arrangement with the transport operator.

Driver Fatigue

Farmer A has greater capacity to manage the farm hand's fitness to drive. The farmer knows how many hours the hand works each day and can tell them when to work and rest. The farmer knows the farm hand well enough to identify signs of fatigue or ill health. The farmer can ask for a driver licence and driving history and has probably seen the farm hand drive on many previous occasions. As the farm hand's record keeper (if the vehicle is a fatigue regulated heavy vehicle) the farmer has records of the hand's work and rest hours over the preceding days and weeks, as well as their work hours on the farm.

Farmers B and C will have substantially less capacity to directly manage drivers' fatigue and fitness to drive. They will have less information about them, and no authority over them. Being a direct customer of the owner operator, Farmer C may have more influence over them, but is still unlikely to have all the relevant information about the driver's training, health, or work and rest.

This does not mean that they have no influence or control. There are other matters where they do have the capacity to eliminate or minimise risk.

How each party contributes to overall safety

Heavy vehicle safety is affected by decisions that are made and things that are done, well before the driver gets into a vehicle, and at many points along the way. Those many factors contribute to overall safety, but no one person controls all the factors.

To eliminate or minimise risks arising from heavy vehicle transport activities requires a total system, with different parties contributing different elements.

For example, to minimise the risk of fatigue, that system may include the following parts:

- contractual requirements that do not cause or encourage a driver to drive while fatigued
- good scheduling practices
- driver training about fatigue management
- comfortable/approved sleeper berths
- loading premises laid out and organised to avoid queuing or delays
- suitable resting places along a route
- information for drivers about rest stop locations
- produce being ready for loading at the time indicated
- availability of accurate information about stages of the journey and destination
- monitoring of driver (at every stage) for signs of fatigue, intoxication, or ill health
- providing feedback or taking immediate action (at every stage) if a driver is fatigued
- facilities at end of journey that support productive rest and recovery

The HVNL requires each party to contribute to the safety outcome by managing the things within their influence and control and to the extent that it is reasonably practicable.

⁶ NHVR, *Primary producers and heavy vehicle safety*, 2018. Accessed at www.nhvr.gov.au

Identified Key Risks

This section identifies industry specific hazards and risks in the agricultural and horticultural supply chain and suggested controls identified by industry participants. The focus of this Code is on the Primary Producer to Processor transport activities and business practices — see Figure 1.



Figure 1. Indicative agricultural food supply chain⁵

The key hazards identified by industry include, but are not limited to:

- Not all parties in the agricultural and horticultural supply chain understand their CoR role/s and responsibilities – see section 3.2 of this Code.
- Farmers and Contractors' reluctance to make demands of each other.
- Managing mass, dimension and loading requirements during the harvesting of vegetables such as potatoes, onions, and carrots.
- Fatigue of drivers who also work on the farm during harvest.
- Excess dimensions and secure loading of agricultural machinery such as harvesters.

- The roadworthiness or safety of heavy vehicles that are not regularly used.
- Accessing and loading on agricultural terrain and in varying conditions i.e., in the field or paddock.

Note: The following hazards and risks are possibilities that may arise in the agricultural and horticultural supply chain. They will not be present in all circumstances and the risks may not be realised. They are provided as practical examples that may occur in the industry and do not represent the entire industry.

FATIGUE

Introduction

Driver fatigue is a known road safety hazard that affects drivers of all kinds of vehicles. It creates a risk that a driver will fall asleep at the wheel. Fatigue also affects a driver's decision making and reaction times and their ability to judge distance and speed.

Parties in the CoR have a duty to eliminate or minimise the risk of driver fatigue so far as is reasonably practicable. This obligation is in addition to obligations that apply to drivers of Fatigue Regulated Heavy Vehicles (FRHV) and to their employers and record keepers.

Drivers of Fatigue Regulated Heavy Vehicles

Note: A FRHV is a vehicle with a gross vehicle mass (GVM) above 12t.

Under chapter six of the HVNL, drivers of FRHVs must adhere either to maximum work and minimum rest hours detailed in Schedules 1 or 2 of the *Heavy Vehicle (Fatigue Management) National Regulation*, or to a customised Advanced Fatigue Management (AFM) system. Schedule 1 sets out standard hours. Schedule 2 sets out hours for drivers nominated in Basic Fatigue Management (BFM). (AFM and BFM are fatigue modules in the National Heavy Vehicle Accreditation Scheme).

Drivers of FRHVs are generally required to record work and rest hours in a work diary, but if they are transporting primary produce and work to standard hours, they are exempt from the work diary requirement when working within 160km of their base⁷. The record-keepers for those drivers are still obliged to keep records of the driver's daily and weekly work and rest hours and other information.⁸

Note: Tasks related to the use of the vehicle that are considered "work time" for the driver include, for example – inspecting, servicing, or repairing the vehicle, cleaning or refuelling the vehicle, loading or unloading the vehicle, inspecting a load on the vehicle, applying for a permit for the vehicle, any time spent inside the vehicle while the engine is running. (s221, HVNL)

AFM is an accreditation module which provides an alternative work and rest option. This arrangement is designed to reduce the likelihood of a driver working while tired and resting while alert; rather, it provides for a more flexible work and rest rule set with a clear focus on fatigue risk management.

Compliance vs Risk Management

For drivers of FRHVs, compliance with the regulated work and rest hours⁹ is a sound foundation for managing the risk of fatigue, but it may be insufficient to minimise the risks of driver fatigue so far as is reasonably practicable. This is for a couple of reasons. Firstly, the way that the regulated hours fit into a driver's scheduled journey may not be a good fit for the driver's individual sleep cycle – drivers may end up driving while tired and resting while alert. Secondly, the HVNL definition of "work" is limited to work to do with the heavy vehicle and does not take account of other work performed by a driver.

This issue is illustrated in the following example:

Case Study: After working on the farm throughout the day, a farmer drives their own truck to transport their harvest to a packing facility or processing plant.

Before driving the truck, the farmer has been working on the farm, cultivating the land, caring for crops, and maintaining and repairing farm equipment. Farm work involves hard physical labour, in hot or cold conditions, often in dry/dusty or wet/muddy environments and continues for long hours day after day. During harvest, the farmer may work seven days per week, for an extended period.

Farm work that has nothing to do with the truck, is not considered "work" per the HVNL definition. Therefore, despite being already fatigued before getting behind the wheel of a FRHV, a farmer could still be complying with regulated work and rest hours though they would be in breach of their duty not to drive while fatigued. (See s228, HVNL).

The risk may be compounded, particularly during harvest time, if the farmer experiences lengthy delays when waiting to load or unload their truck.

Drivers of vehicles up to 12t

Vehicles up to 12t are not FRHVs, so their drivers are not required to work to regulated hours, but under the primary duty provisions in Chapter 1A of the HVNL, these drivers' fatigue risk is also one of the public risks for which CoR parties are responsible. This responsibility extends to all heavy vehicle drivers, not just the drivers of FRHVs.

Note: Employed drivers are not parties in the CoR, but an owner operator is a CoR party and also has a duty to ensure the safety of their transport activities, including managing the risk of fatigue.

Depending on what they do, different parties will manage the risk in different ways. For example, a farmer alerts a driver if loading will be delayed, so that the driver can make an informed decision about when and where to rest en route to the farm. The manager of a processing plant manages the truck queue so that drivers don't have to keep their engines running while waiting.

For parties who influence or control the number of hours a driver works, the work and rest hours in the regulations may be a useful guide to the maximum hours a driver should work. They should note however that linehaul driving has a different fatigue risk profile from local work and that linehaul vehicles are usually equipped with comfortable, approved sleeping berths, an amenity that drivers of smaller vehicles may not enjoy.

For more information about fatigue management see www.nhvr.gov.au/safety-accreditation-compliance/fatigue-management

1 Risk: The driver of a heavy vehicle is impaired by fatigue and loses control of the vehicle, causing a collision and injury to the driver or others and damage to property or the environment.

⁷ See: www.legislation.gov.au/Details/C2021G00758, www.nhvr.gov.au/files/202110-0201-primary-production-work-diary-requirements-and-exemption.pdf

⁸ s319, HVNL

⁹ Schedules 1 & 2, Heavy Vehicle (Fatigue Management) National Regulation

1.1 Hazard: The farmer is impaired by fatigue, due to physical and mental exhaustion, before driving the truck.

1.1.1 Control: Reschedule the journey

1.1.2 Control: Employ another person to drive the truck, for example, a farm hand.

1.1.3 Control: Engage a transport contractor to transport the harvest to the processing plant.

Note: By engaging a transport contractor or driver, the farmer removes themselves from the driving task altogether, but still has obligations to do what is reasonably practicable to eliminate or reduce the risks of the driver becoming impaired by fatigue.

1.1.4 Control: Reduce the hours the farmer spends on other tasks.

If the driving task can't be assigned to another person because it requires the farmer's skills or experience, then the farmer could reduce the hours of other work they perform before driving and ensure they have sufficient sleep during the nights before they undertake driving. The farmer could also engage other persons to do the farm tasks.

1.2 Hazard: The farmer does not have adequate rest time from the driving task within a seven-day period.

1.2.1 Control: Use more than one driver so that the driving task can be shared or rotated.

1.2.2 Control: The farmer schedules a 24-hour period of rest from driving the truck each week.

Since some packing facilities and processing plants do not work 7 days per week, this measure may be easier to implement. Where packing facilities and processing plants do work 7 days per week, the farmer should implement one of the controls listed in 4.5.1 or a combination of controls.

1.2.3 Control: Take practical steps to allow a driver to rest.

If another party notices that the driver of a heavy vehicle is showing signs of being impaired by fatigue, or in breach of their work and rest hours, they should immediately take practical steps to allow the driver to rest, e.g., by adjusting the driver's place in a queue or extending opening hours.

1.2.4 Control: Limit the number of deliveries the processing plant will accept from a farmer, or the number of days on which they will be accepted, for example, only six days per week.

Processing plant employees can monitor farmers who deliver their own produce continuously.

Note: A full day of rest in every 7-day period is a prescribed requirement for a driver of a FRHV. It is good practice for any driver.

1.3 Hazard: The farmer is impaired by fatigue due to the cumulative effect of working excessive hours over long periods, or an accumulated sleep deficit from not getting enough sleep over several days.

Note: Although the farmer may not be in breach of regulated work and rest hours, the risk that the farmer will be driving while impaired by fatigue must still be managed. Apart from work and rest, factors such as the driver's age and overall health will also impact the risk of fatigue. For example, undiagnosed sleep apnoea is a recognised risk for professional and casual drivers alike. Other health conditions may also alter a person's sleep requirements.

1.3.1 Control: Engage a transport contractor to transport the harvest to the processing plant.

Note: By engaging a transport contractor or driver, the farmer removes themselves from the driving task altogether, but still has obligations to do what is reasonably practicable to eliminate or reduce the risks of the driver becoming impaired by fatigue.

1.3.2 Control: Manage the driver's work and sleep schedule throughout the harvest season.

1.3.3 Control: The driver takes a rest break prior to undertaking a driving task, and if needed, delays the start time in consultation with other parties.

Use a combination of measures to ensure the farmer is not fatigued while driving, e.g., temporarily employing people to perform time critical tasks; deferring some tasks; avoiding undertaking lengthy tasks on the days immediately before planning to drive.

1.3.4 Control: Take practical steps to allow a driver to rest

If another party notices that the driver of a heavy vehicle is showing signs of being impaired by fatigue or in breach of their work and rest hours, they should immediately take practical steps to allow the driver to rest, e.g., by adjusting the driver's place in a queue or extending opening hours.

1.3.5 Control: Limit the number of deliveries the processing plant will accept from a farmer, or the number of days on which they will be accepted, for example, only six days per week.

Processing plant employees can monitor farmers who deliver their own produce continuously.

1.4 Hazard: Long waiting times or delays at premises where produce is loaded or unloaded contribute to driver fatigue (e.g., farms, processing plants, packing facilities, stores etc.).

Note: These delays impact a driver's overall fatigue. They also affect the ability of a FRHV driver to comply with work and rest hours requirements.

1.4.1 Control: Arrange for the right number of vehicles or loads per day based on the premises' capacity and staffing or amount of produce.

1.4.2 Control: Minimise delays by creating a delivery/loading schedule so that drivers are impacted less by queuing.

1.4.3 Control: Provide drivers with a means (direct or indirect) to contact each of the premises they will attend during a shift.

- 1.4.4 Control: Provide employees at premises where produce is loaded or unloaded with a means (direct or indirect) to contact each driver that will attend their premises during a shift.
- 1.4.5 Control: Notify other parties of delays or anticipated waiting times.
- 1.4.6 Control: Provide the flexibility to adjust booked times when required, without penalty.
- 1.4.7 Control: Check the driver has capacity in their work and rest hours to allow for unforeseen delays.
- 1.4.8 Control: Establish and use a system to identify the order in which vehicles will be loaded or unloaded. Allow drivers to park and rest in position, without having to move from place to place in a queue.
- 1.4.9 Control: Allocate an area for drivers to park while waiting to load or unload. Where possible, choose a location that is away from other machinery or vehicles and that is more comfortable for drivers e.g., where there is shade, shelter, amenities etc.
- 1.4.10 Control: Encourage drivers to turn off their engines and rest while waiting to load or unload.
- 1.5 Hazard: Driver is not properly trained to manage fatigue**
- 1.5.1 Control: Obtain training about recognising and managing the effects of fatigue.
- Training should include other factors that contribute to fatigue such as medication, alcohol and drug use, medical conditions, diet, lifestyle, and other work or family demands.
- 1.5.2 Control: Provide training to drivers about recognising and managing the effects of fatigue.
- Training should include other factors that contribute to fatigue such as medication, alcohol and drug use, medical conditions, diet, lifestyle, and other work or family demands.
- 1.5.3 Control: Only contract with drivers who can demonstrate they have received training in fatigue management.
- 1.6 Hazard: Contract with driver/transporter encourages driving while fatigued**
- 1.6.1 Control: Ensure contracts do not cause or encourage a driver to drive whilst fatigued and allow drivers to stop and rest if fatigued, without incurring penalties for delay.
- 1.7 Hazard: Driver/contractor does not have information necessary to schedule the trip so as to avoid fatigue.**
- 1.7.1 Control: Provide drivers with all the necessary information about the journey and destination in advance.
- This information should include, but is not limited to:
- opening and closing times of loading and delivery locations
 - travel distances and likely travel times
 - delays which may be experienced en route e.g., stock crossings, poor weather
 - location of rest stops along the journey
 - also note the controls about contacting drivers and destinations at 4.5.4.
- 1.7.2 Control: Use more flexible work and rest hour options available through BFM/AFM to structure schedules in a way that decreases the accumulation of driver fatigue
- 1.8 Hazard: Driver is unaware that they are impaired by fatigue**
- 1.8.1 Control: If a driver is observed to be fatigued, take practical steps to support them to rest immediately.
- For example, assign the driving task to another driver.
- 1.8.2 Control: Report the fact that a driver appears fatigued, or complains of being tired, to the transport operator and to other parties in the CoR.



VEHICLE MAINTENANCE AND ROADWORTHINESS

Introduction

Ensuring that a heavy vehicle is roadworthy and properly functioning is a fundamental requirement of the primary duty. The risks that arise from defective vehicles are well known. Damage or wear to components such as brakes, steering and suspension are critical hazards in the event of a collision. Other components can also affect the overall safety of the vehicle. Equipment such as lights, signals and horn enable other road users to see a heavy vehicle and predict its movements. Effective rear vision mirrors and radio improve a driver's awareness of the road environment.

As a rule, newer vehicles have improved safety profiles, particularly because of requirements for safety features such as electronic stability control, autonomous braking systems and emerging technologies for lane control and collision avoidance. Older vehicles lack some of those features and may be more difficult to maintain, particularly where suitable spare parts are not readily available.

Case Study: A farmer owns a truck that is used once per year, for a few months at a time during the harvest season. The truck sits idle and unused in a farm shed for the rest of the year. The farmer uses the ageing truck to transport the harvest to a packing facility or processing plant.

The truck may not be inspected or maintained during this period. The truck may be an older model—for example, over 20 years old. The truck is maintained by the farmer. The truck may be driven on unsealed/rough roads, paddocks, and uneven terrain. The truck may operate in dirty, dusty, and muddy conditions.

Note: In Tasmania, there are no inspection requirements for a heavy vehicle unless it has been unregistered for more than three months.

Resources

Original equipment manufacturer (OEM) specifications provide detailed instruction for the frequency with which routine maintenance should be carried out on each part of a vehicle and recommend appropriate spare parts or replacements.

For general information about heavy vehicles, including a suggested pre-start checklist, refer to the *Tasmanian Heavy Vehicle Drivers Handbook*¹⁰, MR145/018.

The NHVR's National Heavy Vehicle Inspection Manual (NHVIM)¹¹ provides pass/fail criteria that assist a person maintaining a vehicle to assess whether a part is functioning at a safe standard. It also contains a pre-start inspection checklist.

For further information about vehicle standards and modifications, refer to the NHVR web pages: www.nhvr.gov.au/safety-accreditation-compliance/vehicle-standards-and-modifications

2 Risk: A poorly maintained or unroadworthy vehicle presents the risk of a collision, causing death or injury to the driver or other road users.

- 2.1 Hazard: The heavy vehicle is not maintained to OEM (original equipment manufacturer) specifications and genuine spare parts are not used.**
 - 2.1.1 Control: Engage a transport contractor with a newer fleet of heavy vehicles to transport the harvest.**

By doing this the farmer works with a transport operator who manages the vehicle's maintenance. If the farmer does notice something that looks unsafe with a truck, they should report it to the transport operator.
 - 2.1.2 Control: Replace the vehicle with one that is in better mechanical condition and more reliable, whether by purchase, hire or loan.**
 - 2.1.3 Control: Choose a transport contractor who is in a maintenance accreditation scheme e.g., NHVAS**
 - 2.1.4 Control: At a minimum, maintain the heavy vehicle to OEM specifications and service schedules per the operator's manual.**

Maintain a record of servicing and copies of invoices for maintenance and repairs. Seek expert advice about suitable replacement or substitute parts.

- 2.2 Hazard: The heavy vehicle is prone to increased wear and tear (e.g., component fatigue) due to its age.**
 - 2.2.1 Control: Conduct service and maintenance more often than recommended by the OEM.**
 - 2.2.2 Control: Monitor the heavy vehicle's condition by having it inspected by a qualified mechanic at regular intervals.**
 - 2.2.3 Control: If necessary, adapt the service or maintenance schedule further until it is effective at identifying, preventing, and correcting vehicle defects or areas of accelerated vehicle wear and tear.**
- 2.2.4 Control: Conduct a visual safety inspection (pre-departure/daily check) of the heavy vehicle prior to any use.**

Continue to adapt the frequency of service and inspection as the vehicle ages.

This will confirm that the vehicle is safe to the limits of the inspection. Repair any faults that would prevent the truck's safe use, before driving the heavy vehicle.

Note: For guidance on the daily check and an example pre-departure checklist, refer to the Tasmanian Heavy Vehicle Drivers Handbook and the NHVIM. For pass/fail criteria for most heavy vehicle components, refer to the NHVIM.

- 2.2.5 Control: Record any observations that a heavy vehicle may be unroadworthy or otherwise unsafe. Report this to the driver and/or operator of the vehicle.**
- 2.2.6 Control: Maintain comprehensive and accurate service records for each heavy vehicle.**

¹⁰ HV_handbook_Web_20180118.pdf (transport.tas.gov.au)

¹¹ www.nhvr.gov.au/safety-accreditation-compliance/vehicle-standards-and-modifications/national-heavy-vehicle-inspection-manual



2.3 Hazard: The heavy vehicle is subject to accelerated wear and tear (stressors) from operating in varying conditions and environments.

- 2.3.1 Control: Choose a vehicle that is designed to operate in harsh environments.
- 2.3.2 Control: Reassess loading and unloading locations to ensure the most appropriate environment is used.
- 2.3.3 Control: Conduct service and maintenance checks more often than recommended by the OEM, targeted at high-risk components.
- 2.3.4 Control: Monitor the heavy vehicle's condition by having it inspected by a qualified mechanic at regular intervals.
- 2.3.5 Control: If necessary, adapt the service schedule further until it is effective at identifying, preventing, and correcting vehicle defects or areas of accelerated wear and tear.

Continue to adapt the frequency of service and inspection as the vehicle ages.

- 2.3.6 Control: Maintain a record of servicing and copies of invoices for maintenance and repairs.

2.4 Hazard: Build-up of dirt, mud and other contaminants, can accelerate wear and tear, cause corrosion of heavy vehicle components, and disguise defects such as cracks.

- 2.4.1 Control: Service and lubricate the vehicle components regularly and more frequently than OEM specifications due to the harsher operating environment. Maintain a record of service intervals.
- 2.4.2 Control: Choose replacement parts that are designed to operate in harsher environments.
- 2.4.3 Control: Prior to each harvest season, conduct a thorough inspection of the vehicle.

- 2.4.4 Control: Prior to each harvest season, engage a qualified mechanic to thoroughly inspect the vehicle.

- 2.4.5 Control: Repair any detected faults before the vehicle is driven.

- 2.4.6 Control: Clean or remove the bulk of deposited mud or dirt from vehicle components as frequently as possible.

Thoroughly clean mud or dirt from vehicle components once per week and at the end of each harvest season.

2.5 Hazard: Vehicle systems and components become inoperative due to extended period without use.

- 2.5.1 Control: Conduct detailed inspection of vehicle before use, paying particular attention to those systems and components which can be damaged after storage.

Some components and systems which should be checked thoroughly after extended periods of non-use include:

- tyres – check for flat spots, cracking and ensure correct pressures
- battery – check charge levels, fluid levels and general condition
- braking – components may have seized due to surface rust (auto slack adjusters, brake calliper pistons, etc)
- air system – look for water in air tanks
- fuel – degradation of diesel which has been sitting in a tank for extended periods
- diesel exhaust fluids – additives such as AdBlue can degrade over time.

- 2.5.2 Control: Check vehicle for signs of damage caused by rodent infestation or attack.

Given the commonality of rodent infestation and storage in agricultural structures, this may also have an impact on vehicle systems and electrics

MASS MANAGEMENT

Introduction

Heavy vehicle mass limits protect road pavement and infrastructure from damage. Protection of road infrastructure falls within the primary duty because of the way that public safety is defined. There is a safety element to mass limits too. When vehicles are overloaded – particularly when they exceed the manufacturer's recommended mass limits – their steering, braking and stability may be compromised. In the event of a collision, an overloaded vehicle has greater potential to cause injury and damage.

Resources

Check information from the OEM for the maximum safe load for each vehicle. Refer to the *Heavy Vehicle (Mass, Dimension and Loading) National Regulation* (HV(MDL)NR) for gross and axle mass limits, or refer to the NHVR¹² for information about permits and exemptions. Note that mass limits can apply for individual roads or bridges. As a rule, where there are conflicting limits, you should comply with the lowest limit.

The *National Class 1 Agricultural Vehicle and Combination Mass and Dimension Exemption Notice*¹³ and the *Tasmania Class 1 Load Carrying Vehicles Mass and Dimension Exemption Notice*¹⁴ both provide exemptions for eligible vehicles from certain mass and/or dimension requirements set out in the HV(MDL)NR.

Case Study: A potato farmer is harvesting potatoes for delivery to a processing plant. Spud trailers are bulk loaded in the field by a bunker harvester and load weights are estimated. The weight of the potatoes may vary based on the variety (specific gravity/dry matter content), their size and the amount of mud or dirt stuck to the potato. The weight of the potatoes may also vary from paddock to paddock due to different growing conditions that affect the above variables.

Potatoes have been loaded into bunkers during harvest. The bunkers are then unloaded into one or another heavy vehicle combinations with differing tare and gross weights. Typically, a prime mover tows a drop trailer, or a tandem (2 axle) or triaxle (3 axle) spud trailer. Bunker harvesters and spud trailers are unlikely to be fitted with on-board weigh scales so the weighing devices, so the load can't be measured accurately.

Potatoes may be piled above the sides of the spud trailer and may not be appropriately contained or restrained.

Note: Load weights are estimated based on the capacity of the bunker harvester and heavy vehicle combination. For example—a harvester with a nominal six (6) tonne bunker, loading a common six (6) axle semitrailer with a nominal 24 tonne net weight, will load four (4) bunkers into the spud trailer i.e., $4 \times 6t = 24t$.

Note: While this example is based on the harvesting of potatoes, it can be applied to the harvesting of all agricultural commodities, for example, including but not limited to, carrots and onions

3 Risk: An over mass vehicle can be difficult to control and could cause a collision, causing injury to other road users, damage to other vehicles and damage to road infrastructure.

3.1 Hazard: Estimated load weights are not accurate due to the differing characteristics of potatoes.

3.1.1 Control: Retrofit weighing devices to the harvester to measure the actual weight of potatoes in the bunker.

Motion scales may be able to be retrofitted to some existing bunker harvesters.

3.1.2 Control: Record the number of bunkers loaded into each combination and use weighbridge feedback to estimate the approximate mass of subsequent bunker loads of potatoes with similar characteristics.

Where accurate weighing or estimating is not possible, load below the estimated limit to enable a buffer.

3.2 Hazard: The harvester does not adjust the weight of produce loaded onto the vehicle to account for varying tare weights of each heavy vehicle combinations.

3.2.1 Control: Fit on-board weighing devices to measure the mass of axle groups and calculate the gross vehicle mass and monitor compliance to legal mass limits.

The load should be adjusted as needed to comply with legal mass limits.

3.2.2 Control: Provide accurate information about each vehicle's tare mass and authorised gross mass to the harvest operator.

The harvest operator adjusts the number of bunkers to be loaded onto the combination, based on its net capacity.

3.3 Hazard: The weight of the load is not accurately measured, or is underestimated, resulting in the heavy vehicle combination being overloaded.

3.3.1 Control: Fit on-board weighing devices to measure the mass of axle groups and calculate the gross vehicle mass.

Monitor compliance with the mass limits for the vehicle and adjust the load as required.

3.3.2 Control: Weigh each truck on a weighbridge as it arrives at a processing plant or packing facility and notify the driver of the gross mass of the vehicle for future reference to assist loading.

3.3.3 Control: Notify the harvest operator of the total mass of the load and whether the mass limits of the vehicle combination were exceeded.

3.3.4 Control: Mark a "waterline" (or waterlines e.g., one for heavier potatoes and another for lighter potatoes) inside the spud trailers as an indicative volume of potatoes to be loaded, based on experience and weighbridge data.

In each new loading circumstance, start by loading to the waterline and adjusting subsequent loads be just under the maximum authorised mass, so as to allow for error.

¹² www.nhvr.gov.au/road-access

¹³ www.nhvr.gov.au/C2020G00213

¹⁴ www.nhvr.gov.au/files/c2017g00508-tas-load-carrying-vehicles-mass-dimension-exemption-2017-no1.pdf

3.4 Hazard: Trucks that are oversize or overmass for the roads they are operating on may cause damage to roads and road infrastructure.

3.4.1 Control: Survey and plan routes to be taken to ensure that public roads and infrastructure are suitable, noting road and bridge mass limits.

Obtain appropriate permit/s, issued by the NHVR, if required. Check the NHVR Agricultural vehicle permit page to see if your heavy vehicle is eligible to be covered under a notice or whether you require a permit.

3.4.2 Control: Measure or know the dimensions and mass of the vehicle to ensure route compliance.

4 Risk: Extra trips are made to transport the same number of potatoes, increasing the overall risk to road users because of increased vehicle movements.

4.1 Hazard: The weight of the load is overestimated, resulting in the spud trailer and heavy vehicle combination being underloaded.

4.1.1 Control: Fit on-board weighing devices to measure the mass of axle groups and calculate the gross vehicle mass.

Monitor compliance with the mass limits for the vehicle and adjust the load as required.

4.1.2 Control: Weigh each truck on a weighbridge as it arrives at a processing plant or packing facility and notify the driver of the gross mass of the vehicle for future reference to assist loading.

4.1.3 Control: Notify the harvest operator of the total mass of the load and whether the mass limits of the vehicle combination were exceeded.

4.1.4 Control: Mark a “waterline” (or waterlines e.g. one for heavier potatoes and another for lighter potatoes) inside the spud trailers as an indicative volume of potatoes to be loaded, based on experience and weighbridge data.

In each new loading circumstance, start by loading to the waterline and adjusting subsequent loads be just under the maximum authorised mass, so as to allow for error.

LOAD RESTRAINT AND DIMENSION

Introduction

Effective load restraint is critical for protecting the safety of other road users. Loads that fall from heavy vehicles may injure other road users or damage their vehicles. They can also distract other drivers and can create an ongoing hazard upon the road surface.

Prescribed dimension limits for vehicles take account of road geography, minimum tolerances for safe passing and overtaking, clearance of obstructions above and beside roadways, and the ability of drivers to see other vehicles and obstacles. Vehicles that exceed those dimensions create critical safety risks to other road users and are not authorised to use roads unless authorised by permit or notice. Regulations prescribe additional safety measures such as warning signs, lights and flags that reduce risks to other road users by drawing attention to the vehicle and its projections.

Resources

Prescribed dimension limits are found in Schedule 6 of the Heavy Vehicle (Mass Dimension and Loading) National Regulation¹⁵. Conditions that apply to over-dimension vehicles travelling under notice or permit are found in Schedule 8 of that same regulation.

The Loading Performance Standards are found in Schedule 7 of the *Heavy Vehicle (Mass Dimension and Loading) National Regulation*¹⁶. For detailed guidance about compliance with the Loading Performance Standards and practical suggestions for restraining a range of load types, refer to the Load Restraint Guide¹⁷.

The *National Class 1 Agricultural Vehicle and Combination Mass and Dimension Exemption Notice*¹⁸ and the *Tasmania Class 1 Load Carrying Vehicles Mass and Dimension Exemption Notice*¹⁹ both provide exemptions for qualifying vehicles from certain mass and/or dimension requirements set out in the HV(MDL)NR.

Case Study: A harvest operator arranges to transport their harvester from farm to farm. The harvester is a heavy, oversize piece of machinery.

The harvester is 11.2m long (including the draw bar), 3.3m wide and 3.7m high. It overhangs the sides of a standard (2.5m wide) trailer.

The harvester weighs 16 tonnes (when empty). It is common practice to restrain harvesters, and other machinery, with 4 transport chains (regardless of the weight). The driver restrains the harvester with 4 x 10mm transport chains and turnbuckles. The driver attaches two chains to the back of the harvester and two chains to the front.

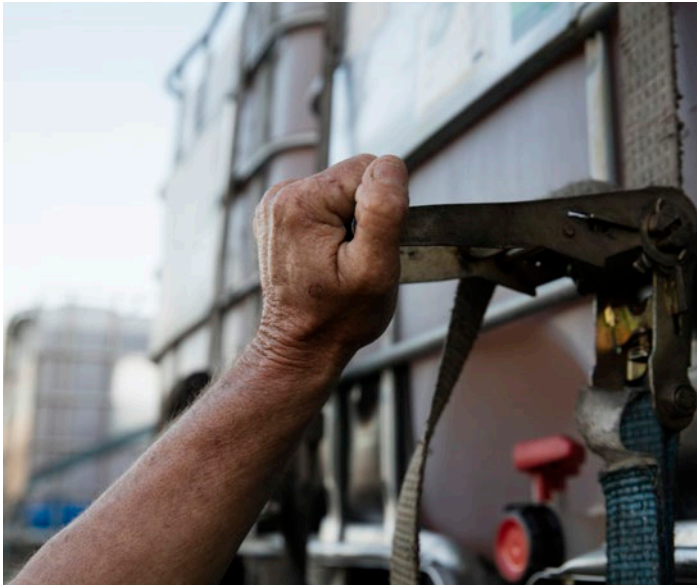
¹⁵ www.legislation.qld.gov.au/view/pdf/inforce/current/sl-2013-0077

¹⁶ www.legislation.qld.gov.au/view/pdf/inforce/current/sl-2013-0077

¹⁷ www.nhvr.gov.au/files/202112-1285-load-restraint-guide-2018.pdf

¹⁸ www.nhvr.gov.au/C2020G00213

¹⁹ www.nhvr.gov.au/files/c2017g00508-tas-load-carrying-vehicles-mass-dimension-exemption-2017-no1.pdf



5 Risk: Falling potatoes impact other road users and contaminate the roadside environment.

5.1 Hazard: Potatoes are not effectively restrained in the trailer.

5.2 Hazard: unrestrained potatoes are lost outside their growing area, contributing to the spread of insects and disease.

5.2.1 Control: Cover the truck and/or trailer carrying the potatoes with a tarpaulin.

Ensure that the tarpaulin is properly secured and that the potatoes are contained in accordance with the loading performance standards.

5.2.2 Control: Reduce the load height of potatoes in the bin or trailer to ensure they cannot fall out.

5.2.3 Control: Drive the vehicle in a manner which ensures the contents of the load will not fall from the bin or trailer.

6 Risk: An over-dimension load could cause a collision and cause injuries to the driver and others, or damage to infrastructure.

6.1 Hazard: The load exceeds the maximum side projection and may not be identified as an over width load.

6.1.1 Control: Confirm the dimensions of the load and identify whether the movement can be carried out under gazette notice or whether it requires a permit.

6.1.2 Control: Apply to the NHVR for a permit several weeks before the period of travel and comply with the conditions of the permit.

6.1.3 Control: Engage a transporter who has a reputation for safety and compliance and who has the necessary safety equipment, including signs, flags, and warning lights.

6.1.4 Control: Provide enough notice to allow a transporter to obtain a permit if necessary, and to assess the route.

6.1.5 Control: Share information with the transporter, or a pilot or escort, about local hazards e.g., sharp bends, narrow roads, times of increased traffic flow etc.

6.1.6 Control: Monitor contractors' compliance with conditions that apply to the movement of the harvester and share the information with other parties.

Note: The above controls should be applied in addition to the requirements prescribed in Schedule 8 of the HV(MDL)NR, which include:

- If the vehicle and its load are wider than 2.5m:
 - Attach a warning sign to the front and rear of the vehicle
 - Attach a flag to each corner of the vehicle
- If the load projects beyond the side of the vehicle, attach a flag to each projecting corner of the load
- If the vehicle and its load are wider than 3m, attach a warning light to the vehicle
- The route must be assessed to ensure it does not cause disruption to relevant services and damage to relevant property

The movement of over dimension loads is also subject to the conditions of any exemption notice or permit, including in respect of travel times, speeds, visibility, and routes.

7 Risk: An improperly restrained load could fall from a heavy vehicle, cause a collision and cause injuries to the driver and others, or damage to infrastructure.

7.1 Hazard: The harvester may not be appropriately restrained.

7.1.1 Control: The harvest operator and subcontractor work out what restraint is required using the direct restraint load tables in the Load Restraint Guide.

Case Study: (cont.): Using the direct restraint load tables in the Load Restraint Guide, the harvest operator and subcontractor determine that 4 x 13 mm transport chains with claw hooks or winged grab hooks (9.0 t lashing capacity) are necessary in all directions to restrain the harvester

7.1.2 Control: The harvest operator seeks professional advice from a suitably qualified engineer to develop a loading plan.

7.1.3 Control: The harvest operator seeks advice from the OEM to obtain a certified lashing plan (where available).

SAFE ACCESS AND LOADING

Introduction

For loading agricultural and horticultural products, a heavy vehicle may have to be driven into locations and across terrain not suitable for vehicles weighing many tonnes. Narrow roads and rough and unstable surfaces will challenge drivers' abilities unless they have the skills and experience to operate in this environment.

Vehicles operating in these conditions may have reduced stability during loading and travel and are at greater risk of collisions and incidents arising from travel on unfamiliar routes. Vehicles will also be subjected to accelerated wear and will need to be maintained and inspected more frequently.

Resources

Local knowledge of appropriate heavy vehicle access routes onto farms and loading areas will be invaluable. Gathering the information and establishing the best routes may take time. Undertaking a drive-through in advance may be necessary, particularly for new drivers or drivers operating in new areas.

Case Study: A farmer is harvesting grain for delivery to a bulk handler. Heavy vehicle combinations ('grain trucks') are loaded in the paddock on agricultural terrain. To access the farm, grain trucks may have to drive on unfamiliar routes and roads. To access the paddock, grain trucks may have to drive on rough, uneven terrain, and narrow or raised tracks or roads. Harvesting of grain and loading of grain trucks may occur near gullies and erosions²⁰ or on rough, uneven terrain. Grain trucks may have to operate and load in varying conditions, such as soft, uneven ground or wet and muddy conditions.

Note: While this example is based on the harvesting and loading of grain, it can be applied to the harvesting and loading of all agricultural and horticultural commodities.

8 Risk: A heavy vehicle rolls or loses control, which causes injuries to the driver and others and may damage vehicles, property, and infrastructure.

8.1 Hazard: A driver is unfamiliar with local routes or driving hazards.

- 8.1.1 Control: Reassess loading and unloading locations to ensure the most suitable environment is used.

- 8.1.2 Control: Use drivers familiar with the route.

- 8.1.3 Control: Develop a "local hazard" road map that identifies driving hazards in the area that truck drivers should be aware of.

For example, but not limited to:

- low height underpasses/clearances
- steep descents
- narrow roads or bridges
- floodway or causeways
- level rail crossings or cattle grids
- tight corners and advisory speed limits
- steep cambers, edge breaks or drop offs
- school zones or pedestrian crossings etc.

- 8.1.4 Control: Provide a copy of the "local hazard" road map to any transport operator or driver who will be working in the area.

- 8.1.5 Control: Request information about local conditions. Speak to other transporters who work in the area.

- 8.1.6 Control: Plan and check access routes before driving heavy vehicles on farm tracks or roads.

- 8.1.7 Control: Develop a simple driver safety induction or toolbox talk.

Information provided should include, but not be limited to, the following:

- access routes on road and on farm (as above)
- black spot road maps (as above)
- access to amenities and rest areas on farm or nearby
- emergency contact phone numbers
- other relevant hazards that drivers or other workers may need to be aware of.

- 8.1.8 Control: Do a training or survey run, pairing a new driver with a driver familiar with the locale and its features.

8.2 Hazard: Trucks work on or near embankments and on uneven or unstable terrain when loading.

- 8.2.1 Control: Level and compact farm tracks, roads and loading areas.

- 8.2.2 Control: Select loading areas on farm that are on hard, even ground and capable of withstanding the weight of loaded heavy vehicles.

- 8.2.3 Control: Include information about the location and gradient of embankments in a "local hazard" road map and communicate it to transport operators and drivers.

²⁰ Temperley, J B and Fragar, L J. Safe grain production - A practical guide to grain production safety and safe grain handling, 2007, p.19. Published by the Rural Industries Research and Development Corporation and the Australian Centre for Agricultural Health and Safety. Accessed at aghealth.sydney.edu.au

KEY TERMS AND DEFINITIONS

AFM means Advanced Fatigue Management, an accreditation module available under the National Heavy Vehicle Accreditation Scheme (NHVAS) which provides an alternative work and rest option. This arrangement is designed to reduce the likelihood of a driver working while tired and resting while alert; rather, it provides for a more flexible work and rest rule set with a clear focus on a fatigue risk management system.

Agriculture (or agricultural) is the practice of farming, including cultivation of the soil for the growing of crops and the rearing of animals to provide food, wool, and other products.

BFM means Basic Fatigue Management, an accreditation module available under the NHVAS which extends the hours which drivers may work, where the business has better fatigue management procedures and training in place.

Consignee is a CoR party that receives goods delivered by a heavy vehicle

Consignor is a CoR party that consigns goods for transport by a heavy vehicle

CoR means Chain of Responsibility (see section 1.4)

Employer is a CoR party that employs a heavy vehicle driver

Gross Combination Mass (GCM) means the total maximum loaded mass of a vehicle and any vehicles it may lawfully tow at any given time.

Gross Vehicle Mass (GVM), of a vehicle, means the maximum loaded mass of the vehicle.

Horticulture (or horticultural) is the practice of garden cultivation and management – the agriculture (farming) of plants such as flowers, fruits, vegetables, or ornamental plants.

HVNL means *Heavy Vehicle National Law*.

HV(MDL)NR means Heavy Vehicle (Mass, Dimension and Loading) National Regulation.

Loader is a CoR party that loads a heavy vehicle

Loading Manager is a CoR party that manages premises where five or more heavy vehicles are loaded or unloaded each day

NHVAS means the National Heavy Vehicle Accreditation Scheme, a scheme managed by the NHVR that allows accredited operators greater flexibility in complying with mass, maintenance, or fatigue requirements of the HVNL. There are requirements for enrolment in the scheme and ongoing monitoring and assurance.

NHVR means National Heavy Vehicle Regulator.

OEM means Original Equipment Manufacturer.

Packer is a CoR party that packs or assembles goods for transport in a heavy vehicle

Operator is a CoR party that directs the control and use of a heavy vehicle

Prime contractor is a CoR party that engage someone to drive a heavy vehicle under a contract for services

Primary Producer means an individual, trust or company engaged in agriculture or horticulture.

Processor, or processing plant, means a person converting raw materials into food commodities including cutting, cleaning, packaging, storage, and refrigeration of raw foods.

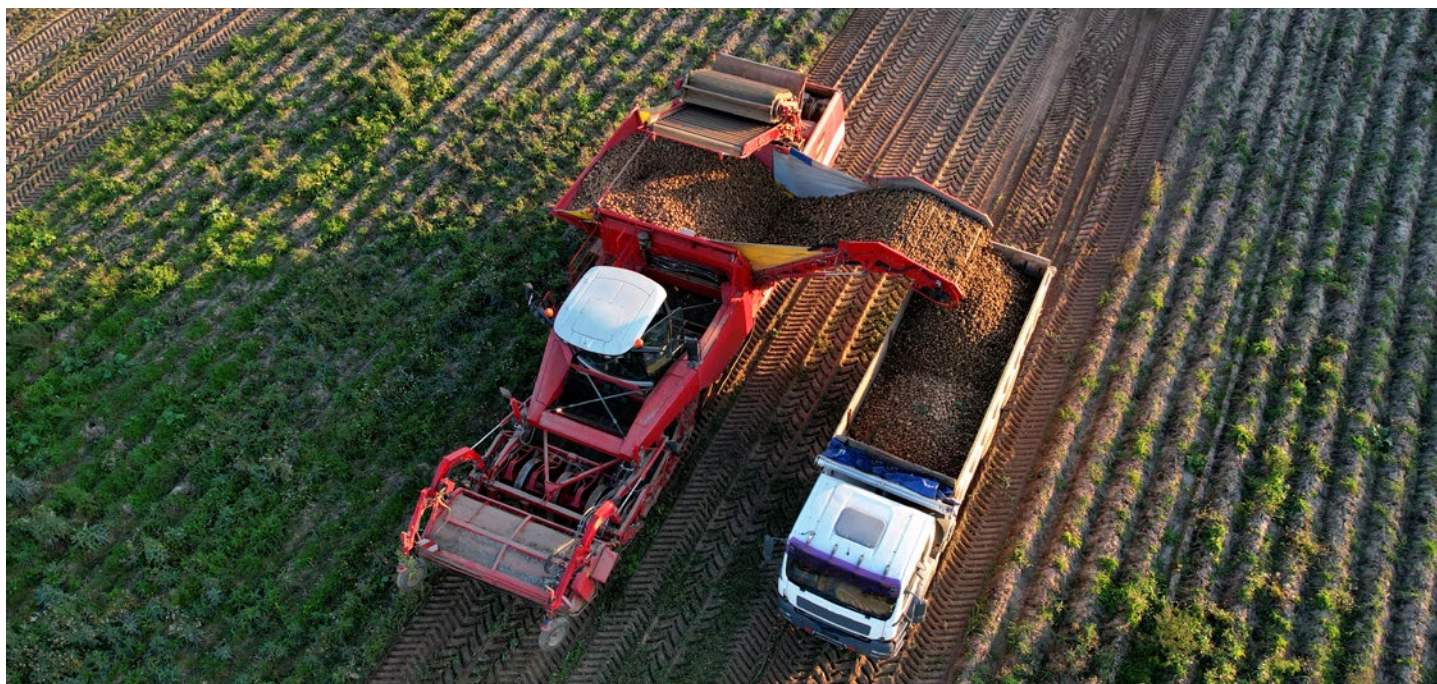
Public Risk means risks to drivers, passengers, other road users and members of the public in the vicinity of roads and public places. It also includes the risk of damage to property, including vehicles and loads, damage to road infrastructure and harm to the environment.

RICP means Registered Industry Code of Practice.

Scheduler is a CoR party that schedules the transport of goods and passengers in a heavy vehicle, or schedules a driver's work and rest hours

TFGA means Tasmanian Farmers and Graziers Association.

Unloader is a CoR party that unloads a heavy vehicle



CODE ADMINISTRATION

This Code will be maintained by the NHVR in accordance with the conditions of registration in Section 706(2) of the HVNL, and the *Guidelines for Preparing and Registering Industry Codes of Practice* (February 2022).

As Sponsor of this Code of Practice, the Tasmanian Farmers and Graziers Association (TFGA) will support the maintenance of this code and contribute to its review.

Contact details

National Heavy Vehicle Regulator

codes@nhvr.gov.au

Tasmanian Farmers and Graziers Association (TFGA)

Attention: Policy and Projects Manager

PO Box 193, Launceston TAS 7250

P (03) 6332 1800

E reception@tfga.com.au

Revision History

Version	Release date	Comment
1.0	30/6/2022	Registered by the NHVR in accordance with section 706 of the HVNL
Next review date		June 2025

NATIONAL HEAVY VEHICLE REGULATOR

www.nhvr.gov.au

E info@nhvr.gov.au

P 13 NHVR (13 64 87)

PO Box 492, Fortitude Valley QLD 4006