



GTSN TRUCK BOOK

Version 3.0 – August 2023

Grain Transport Safety Network
WWW.GTSN.COM.AU

QUICK NAVIGATION












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1 Introduction

This Truck Book has been developed by the Grain Transport Safety Network (GTSN) to help ensure that trucks are loaded within legal mass limits reducing the public risks from excessively loaded or excessively large heavy vehicles on our roads.

The GTSN is a collaborative network of grain industry supply chain participants including loaders and unloaders of grain, freight providers, end users, growers, and the government/statutory authorities. The primary objective of the GTSN is to raise awareness of the risks arising from the transport of grain and improve the safety of grain moved by heavy vehicles.

For more information about the GTSN see www.gtsn.com.au.

1.1 Purpose

The purpose of this Truck Book is to guide loaders, unloaders and operators to accurately identify the mass requirements applying to bulk grain trucks. The use of this Truck Book will help ensure trucks are loaded within legal mass limits and reduce the public risks from overloaded heavy vehicles on our roads.

To help simplify the process of identifying truck mass limits, the GTSN also publishes a Truck Chart with the top 12 most used grain truck types (see Figure 1: GTSN Truck Chart). Each truck type is assigned a truck code for ease of identification and reference. This Truck Book complements the Truck Chart by providing more detail on the vast range of heavy vehicles used to transport grain and their mass requirements.

GTSN members periodically review truck volumes to determine the top 12 truck codes for the Truck Chart and review the contents of this Truck Book to make sure all heavy vehicle combinations are included. New truck code requests should be emailed to enquiry@gtsn.com.au.

An electronic copy of this Truck Book and the GTSN Truck Chart can be downloaded from the GTSN website at www.gtsn.com.au.

1.2 The GTSN Truck Chart

A summary of the most commonly grain trucks is on the GTSN Truck Chart (see Figure 1). This should be the first point of reference when understanding grain truck mass limits.

Figure 1: GTSN Truck Chart

Grain Transport Safety Network Truck Chart

Maximum Length		12.5m	19.0m	26.0m	36.5m	Grain Harvest Management									
Category	Code	Image	Description	GML	Vic RFS ¹	GML + Notice ²	CML	HML	0.5mt Steer ³	1.1mt Steer ⁴	QLD ⁵	NSW ⁶	Vic ⁷	SA ⁸	
Rigid Truck	9		3 Axle Rigid Truck	22.50	23.00		23.00 Qld = +0.25t			✓		24.20	23.00	23.60	24.20
Truck & Dog Trailer	16		Common 3 Axle Rigid Truck and 3 Axle Dog Trailer ⁹	42.50		45.00 NSW = 48.00t	43.50			✓		45.70	44.63		45.70
	76		Common 3 Axle Rigid Truck and 4 Axle Dog Trailer ⁹	42.50		50.00 ¹⁰ 55.50 ¹¹ 57.50 ¹²	43.50			✓		45.70	44.63	44.60	45.70
	87		3 Axle Rigid Truck and 5 Axle Dog Trailer	PBS truck: Refer footnote ⁹											
Prime Mover & Trailer	11		Common 5 Axle Semitrailer	39.00	40.00		40.00			✓		41.90	40.00	41.00	42.00
	12		Common 6 Axle Semitrailer	42.50	43.00		43.50	45.50		✓		45.70	44.63	44.60	45.70
B-double	83		Common 7 Axle B-double	55.50	57.00	50.00 ¹⁴	57.00			✓	✓ ¹³	59.70 ¹⁵	57.00	58.30	59.90
	68		Common 9 Axle B-double	62.50	63.00		64.50	68.00		✓		67.10	65.63	65.60	67.70
Road train	28		Common 11 Axle Road train (A Double)	79.00			81.00	85.00		✓	✓	84.90	83.00		85.05
	91		Common 12 Axle Road train (A Double)	82.50			84.50 Qld = +1.00t	90.50		✓	✓	88.70	86.63		86.60
AB-triple	88		Common 14 Axle AB-triple Road train and 2 Axle Dolly	99.00			101.00 Qld = +1.00t	107.50		✓	✓	106.40	104.00		106.05
	96		15 Axle AB-triple Road train and 3 Axle Dolly	102.50			104.50 Qld = +1.00t	113.00 ¹⁶		✓	✓	110.20	107.63		109.73

All masses are in metric tonnes
GML = General Mass Limit
CML = Concessional Mass Limit - Must be registered in NHVAS mass and display sticker on driver's side of the truck.
HML = Higher Mass Limit - Must be on a HML route and registered in NHVAS in Victoria and South Australia + IAP in NSW and Qld
Mass Limits are the maximum limit and it is important drivers know the Gross Combination (GCM) and Gross Vehicle Mass (GVM) and do not exceed that if it is lower than the mass limit
Legal Disclaimer: data is provided for information only
 Further information, refer to the National Heavy Vehicle Regulator www.nhvr.gov.au or www.gtsn.com.au

¹ Refer Victoria Class 3 Road Friendly Suspension Mass Exemption Notice 2019 (No.1)
² Notice means:
 a) National Class 3 Truck and Dog Trailer Mass Exemption Notice 2020 (No.1) – GHMS concessions do not apply to permit mass limit. Most trucks are engineered to load to the maximum mass limit and in some cases axle spacings may limit the mass limit. It is not reasonably practicable to check lower mass limits due to shorter axle spacings
 b) National Class 2 Heavy Vehicle B-Double Authorisation (Notice) 2024 (No.2)
³ 0.5t steer axle allowance applies to trucks with a Gross Vehicle Mass (GVM) over 35 tonnes fitted with specific technologies, including an engine complying with ADR 80/01 (Euro IV), Front Under-run Impact Protection that meets UN ECE Regulation No.93 or ADR 84, and cabin strength that meets the requirements of UN ECE Regulation No.29
⁴ 1.1t allowance applies to Road train and AB triple combinations fitted with steer tyres 375mm or wider and that meet the requirements for the 0.5t steer allowance
⁵ Refer Queensland Class 3 Heavy Vehicle (Grain Harvest Management Scheme) Mass Exemption Notice 2019 (No. 2) – note: Qld GHMS weights are maximum weights and 0.5t steer and 1.1 allowances do not apply when conditions are met. PBS do not qualify for GHMS.
⁶ Refer New South Wales Class 3 Grain Harvest Management Scheme Mass Exemption Notice 2022 (No. 2) – 0.5t steer applies when conditions are met
⁷ Refer Victoria Class 3 Grain Harvest Management Scheme Mass Exemption Notice 2022 (No. 2) Vic RFS Mass Limit – 0.5t steer applies when conditions are met
⁸ Refer South Australia Heavy Vehicle Farm Gate Grain Transport Mass Exemption Notice 2020 (No.1) for trucks operating NHVAS mass to allow loading up to CML + 5% – 0.5t steer applies when conditions are met
⁹ Trucks can operate as PBS vehicles under the National Class 2 PBS Level 2 & 2A Truck and Dog Trailer Authorisation Notice 2016 on routes with PBS 2A or higher access with the following maximum mass limits. PBS CML is the most common mass limit for these combinations in Grain. To operate as a PBS truck, the driver must present the Vehicle Approval, which includes the specific mass limit for that each individual vehicle combination:

Code	PBS (GML)	PBS (CML)	PBS (HML)
16	48.50	49.50	49.50
76	56.00	57.50	57.50
87	59.50	61.50	61.50

¹⁰ Mass limits apply for trucks that comply with the National Class 3 Truck and Dog Trailer Mass Exemption Notice 2020 (No.1)
¹¹ South Australia Class 3 23m Truck and Dog Trailer Mass and Dimension Exemption Notice 2020 (No.2)
¹² Mass Limits apply for trucks that comply with the National Class 3 20m Long 8-axle Truck and 4-axle Dog Trailer Mass and Dimension Exemption Notice (No. 1) on the PBS 2A Network
¹³ Road train prime movers with steer tyres wider than 365mm operating under the National Class 3 Road Train Prime Mover Mass and Dimension Exemption Notice 2021 (No.1) can apply a 1.1 tonne steer depending on the network by state:

	QLD	NSW	Vic	SA
Semi-Trailer	Queensland 25/26 metre B-double Network	New South Wales 25/26 B-double GML Network	Victoria B Double Network	South Australia PBS Level 1A Network
B-Double	Queensland 25/26 metre B-double Network	New South Wales GML Type 1 A-double Network	Victoria Road Train Network	South Australia 26m B-Double GML Network

¹⁴ On general access (non-B double) routes, GML = 50.0t and CML = 51.0t
¹⁵ On routes with no B double access, Qld = 59.70t, NSW and Vic GHMS = 52.5t
¹⁶ NHVR Access Permit Required to Operate in South Australia

Publish date August 2023
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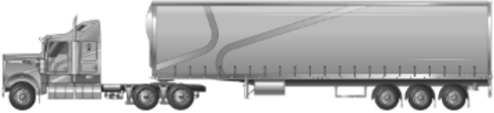
1.3 How to use the truck book

This book is designed to be used with the GTSN Truck Chart (see Figure 1) to provide:

- a complete list of the different truck types and combinations that operate in the grain industry, and
- more detail on the mass limits and types of permits they operate under.

At the core of this Truck Book are the truck codes contained in Section 4 of this book. Figure 2 below is an example of one of the most common grain truck combinations showing the page detail.

Figure 2: Example table showing mass limits for truck code 12 – a common 6 Axle Semitrailer

Semitrailers:		Common 6 Axle Semitrailer											
12													
State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS		
Qld	42.50	-	43.50	45.50	-	✓	✓ ⁴⁶					45.70	
NSW													44.63 ⁴⁷
Vic		43.00											44.60
SA		-											GML 44.63 CML 45.68 HML 47.78

The truck table headings are abbreviated as summarised in Figure 3 below.

Figure 3: Acronyms used in the truck tables

GML	General mass limits
RFS	Road friendly suspension
CML	Concessional mass limits
HML	Higher mass limits
PBS	Performance based standards
GHMS	Grain harvest management scheme

Note: All mass limits are in metric tonnes, rounded to two (2) decimal places.

The mass limits provided are for information only and are accurate at the time of publication.

Any column or cell with “-” in the table represent not applicable.

A tick “✓” in the 0.5t Steer or 1.1t Steer columns indicates the steer axle allowance is applicable and can be added to the stated mass limits.

The Truck Book is designed to navigate as efficiently as possible to the truck code pages and details related to permits using the following features:

1. Quick Navigation on page 1

Use the Quick Navigation at the front of the book to navigate to a lookup table for each type of truck.



4.1	Rigid Trucks	Page 56	
4.2	Truck & Dogs	Page 65	
4.3	Truck and Pig Trailers	Page 81	
4.4	Semitrailers	Page 91	
4.5	B-doubles	Page 103	
4.6	AB-triples	Page 111	
4.7	Type 1 Road Trains	Page 122	
4.8	B-triples	Page 137	
4.9	Type 1 Road Trains with Dog Trailers	Page 142	
4.10	Type 2 Road Trains	Page 160	
4.11	Type 2 Quads	Page 166	

2. Lookup tables by Truck Type

Use the lookup tables for each truck type to navigate to the detailed truck codes (e.g., Truck & Dogs etc.)

4.1 Rigid Trucks

1		2 Axle Rigid Truck
9		3 Axle Rigid Truck
17		3 Axle Twin Steer Rigid Truck
18		4 Axle Twin Steer Rigid Truck
36		5 Axle Twin Steer Rigid Truck
43		4 Axle Tri Drive Rigid Truck

3. Truck Codes (for all known truck configurations and combinations)

Use the detailed truck codes to help determine the mass limit applying to the vehicle (e.g., Common 6 Axle Semitrailer).

Semitrailers: Common 6 Axle Semitrailer

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State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS - GML	PBS - CML	PBS - HML	GHMS
Qld											45.70
NSW	42.50		43.50	45.50	-	✓	✓ ¹⁶				44.63 ¹⁷
Vic		43.00									44.60
SA											GML 44.63 CML 45.48 HML 47.78

4. Truck Code Quick Lookup Table (by number) – all truck codes sorted in numerical order

Alternatively use the Truck Code Quick Lookup Table (by number) at the back of the book (Section 6) to navigate to the detailed truck codes.

6 Truck Code Quick Lookup Table (by number)

1		Rigid Trucks	Page 57	2		Semitrailers	Page 92
3		Semitrailers	Page 93	4		Semitrailers	Page 94
5		Truck and Pig Trailers	Page 82	6		Truck and Pig Trailers	Page 83
7		Truck & Dogs	Page 65	8		Truck & Dogs	Page 177
9		Rigid Trucks	Page 58	10		Semitrailers	Page 95

5. Procedural Guidelines and Technical Information

For more information to assist with determining mass requirements applying to different truck codes. See also links to go to specific sections, figures or truck codes, for example,

GTSN Truck Chart (see **Figure 1**)

1.4 What does the law say?

Over time it has been identified that serious heavy vehicle incidents and breaches of the law, such as overloading, are often caused by the actions or inactions of other parties in the supply chain, not just the truck driver or transport operator.

Chain of Responsibility (CoR) is a concept used in the [Heavy Vehicle National Law](#) (HVNL) to place legal obligations on particular parties in the supply chain of a heavy vehicle, in addition to the truck driver or transport operator.

The aim of CoR is to ensure every party in the chain of responsibility for a heavy vehicle proactively manages risk and prevents breaches of heavy vehicle laws. Most importantly, CoR is in place to reduce public risk (to people, property and the environment) and improve public safety.

Any party who has the **capacity to control and influence** the transport activity is responsible for **ensuring the safety of the transport activities**. If you are a party in the chain of responsibility for a heavy vehicle, you have a **shared responsibility** and a legal obligation to **ensure your conduct does not cause or encourage** breaches of the law. The level and nature of a party's responsibility depends on their ability to **control, eliminate and minimise risk** of the transport activity.

1.5 Who is a party in the chain of responsibility?

A party in the chain of responsibility of a heavy vehicle includes the:

- Employer (of the driver)
- Prime contractor (for the driver)
- Operator (of the vehicle)
- Scheduler (of the vehicle)
- Consignor (named sender of goods) – e.g. growers, bulk handlers
- Consignee (named receiver of goods) – e.g. bulk handlers and ports, feedlots, mills
- Packer (of any goods in the vehicle)
- Loading manager (for any goods in the vehicle) – e.g. bulk handlers and ports
- Loader (of any goods in the vehicle) – e.g. growers, bulk handlers
- Unloader (of any goods in the vehicle) – e.g. bulk handlers and ports.

The HVNL imposes a positive duty on all CoR parties to ensure the safety of their transport activities (section 26C(1) of the HVNL). They must do this in at least two ways: by eliminating or minimising public risks; and by ensuring their conduct doesn't cause or encourage a driver or another person, directly or indirectly, to breach the HVNL. This includes risks and breaches caused by overloading heavy vehicles.

More specifically in relation to mass limits, under section 96 of the HVNL, a person who drives, or permits another person to drive, a heavy vehicle on a road must ensure the vehicle and load, comply with the mass requirements applying to the vehicle.

1.6 What are the risks?

The factors that may contribute to the risk of a grain truck being overloaded include:

- a) Grain is a heavy product that may cause a truck to be overloaded before its cubic capacity is met
- b) Different types of grain are denser (heavier) than others which may contribute to this risk
- c) During the grain harvest season, trucks are loaded on farm in paddocks where there is no, or limited, weighing facilities
- d) Grain loads are typically paid on a per tonne basis and parties will aim to maximise payloads to deliver productive and efficient business outcomes.

An over-mass or unevenly distributed load can adversely affect the stability, steering and braking performance of a heavy vehicle. This can result in the driver losing control of the vehicle and cause serious incidents involving serious injuries and fatalities to drivers, other road users and pedestrians.

A heavy vehicle that is overloaded can cause damage to road infrastructure and damage to the vehicle itself, including suspension damage and degradation of structural integrity.

There are also significant fines and penalties for not complying with mass requirements.

1.7 How to control the risk?

The GTSN maintains this Truck Book so grain industry supply chain participants can cross reference trucks with the corresponding truck code in this Truck Book to confirm legal mass limits. By referencing the technical information section, industry participants can verify permits and corresponding mass limits for entry into weighbridge systems.

It is common for bulk handler weighbridge systems to validate the gross weight of the vehicle against the legal mass limit to verify that the bulk handler and freight provider comply with the legal mass limit.

As a party in the CoR, grain industry supply chain participants have a legal obligation to ensure the vehicle and its load comply with mass limits. This can be done by:

1. Providing accurate weights and quantities of goods loaded
2. Understanding vehicle tare and net weights prior to loading – e.g. by using this Truck Book
3. Verifying loaded vehicles comply with gross mass and where practicable axle/axle group weights
4. Positioning the load to maintain weight distribution and vehicle stability.

More information on CoR and how to take responsibility for the safety of transport activities is available in the [Master Industry Code of Practice](#) (Master Code) – a registered industry code of practice under section 706 of the HVNL.

This is an example what not to do: Case Study – “I’ll take it off the tare”

A truck loads in a paddock to deliver into a bulk handler’s grain silo. There is no weighing equipment in the paddock and the truck exceeds the legal mass limit by 0.5 tonnes. The bulk handler’s system will report the breach to the regulator in that state as per the requirements of the scheme.

The weighbridge operator knows the driver. To avoid conflict, the weighbridge operator offers to disable the weighbridge and use the reason that it is windy. This will allow them to deduct 0.5 tonnes off the gross and tare weights so the truck can be unloaded.

The weighbridge operator and driver have just committed an offence by manipulating the system to unload an overloaded truck.

Obviously, this is an example of what NOT to do.

The truck should be unloaded, and a non-conformance raised with the grower (loader) and transport company (operator) to allow them to adjust their loading practices to minimise the risk of future overloading.

1.8 Search tips and useful links

Notice and permit names, instead of direct links, are included in this Truck Book because the specific link where they are published may be subject to change.

To find a notice or permit, a good approach is to search for the document name using your preferred web engine search provider (e.g. Google etc.). For example, searching for National Class 3 Heavy Vehicle 19m Truck and Dog Trailer Combination Mass Exception (Notice) will take you to the NHVR website.

Useful links include, but are not limited to:

www.nhvr.gov.au

www.tmr.qld.gov.au

<https://www.transport.nsw.gov.au>

www.vicroads.vic.gov.au

1.9 Legal disclaimer

The GTSN invest significant time and effort to record mass limits and information contained in this Truck Book accurately and reflective of the mass limits under the HVNL. The GTSN do not warrant that information in this Truck Book is completely accurate at any given time, and the GTSN encourage all users of the book to take caution with any information provided and refer to the National Heavy Vehicle Regulator for actual mass limits if you have any concerns.

Guidelines are used at various points throughout the document, and they are not always universally implemented.

This Truck Book is a ‘live’ document that aims to consolidate different information sources about truck mass limits into a single, easy to read, guide for users of bulk grain trucks.

Feedback about the Truck Book, or any potential technical inaccuracies are welcome via enquiry@gtsn.com.au. This feedback will be reviewed by the GTSN and, where required, incorporated into future versions of the Truck Book published on the GTSN website at www.gtsn.com.au.

Procedural Guidelines and Technical Information

2 Procedural guidelines

This section outlines common issues that arise when identifying mass limits and other issues related to bulk commodity movements. These procedural guidelines provide general guidance only. Grain industry supply chain participants should refer to their own risk management processes and procedures to control identified risks.

2.1 Accurate information recording

Information entered into business information systems is used for customer invoicing, inventory and compliance purposes.

It is important that this information is entered correctly, in particular:

- Vehicle registration
- Truck type / truck code
- Permits to operate above GML and/or off a gazetted route
- Permit numbers.

When keying in this information be alert for similar characters e.g. number 1 and letter I, letter O and number 0, letter S and number 5 etc.

Helpful tip: Truck registration numbers are typically 6 characters.

When manually recording gross and tare weights where business systems do not allow automatic capture of this data, extra care must be taken to accurately enter it. Also, be aware of changing conditions such as rain or high winds etc. that could affect data accuracy.

Common industry practice is to record the registration plate of the prime mover only. Registration plate details for trailers and dollies are not typically recorded with bulk grain.

2.2 Truck registration checking

A good way to lookup truck registrations is using the National Heavy Vehicle Regulator (NHVR) Registration Check App. The NHVR Registration Checker app allows checking of the registration status of any heavy vehicle registered in Australia, except heavy vehicles registered in the Northern Territory without a national heavy vehicle plate. The app also displays other helpful information, including NHVAS accreditation numbers and PBS Vehicle Approval and Access Permit Numbers.

Truck registration information is not available for bulk download to integrate into business information systems; therefore, it would hinder operations to lookup this information individually for all deliveries. It is considered good practice to do random risk-based audits on truck registrations.

For more information see the NHVR website at www.nhvr.gov.au. The app is free to download from the App Store or Google Play Store.

Note, there can be a delay between registrations being renewed and the data displaying on the NHVR app and website. Cross check with state registration websites before determining if the truck shows as being unregistered before managing.

2.3 Primary producer plates

Due to the agricultural nature of bulk grain handlers, primary producer plates are common. It is difficult to identify if primary producer plates are being used when loading, so bulk handlers often view this as not reasonably practicable to check for.

The risk profile for growers and truck operators is higher, and they must take care to ensure state primary producer requirements are met when transporting grain.

2.4 Mass management guidelines

2.4.1 Loading trucks without weighing facilities

Due to there being no or limited weighing facilities on farm where grain trucks are frequently loaded, especially during the harvest season, there is a real risk of trucks being overloaded.

To manage this risk, trucks are commonly loaded to cubic capacities or waterlines, and this may not always be accurate, particularly when the test weight of the grain varies within the paddock.

The Master Code suggests comparing estimated weights with any confirmed weights, and to take any variations into consideration when adjusting future loading arrangements. For example, where a load is not weighed at the loading point, such as a farm, but is weighed at the destination for invoicing, such as bulk handler country silo.

Some trucks loading on farm may also use vehicles or combinations fitted with on-board mass systems (weigh scales) or air pressure gauges. Care must be taken with these systems when loading in paddocks with uneven, soft surfaces because they can lead to inaccurate weight readings.

2.4.2 Managing trucks that exceed legal mass limits

Despite the controls outlined above, there remains a risk of grain trucks being overloaded. If a grain truck is confirmed to be overloaded upon receipt at a site with a weighbridge, it is recommended the following action be taken:

- Weighbridge systems alerts to ensure data accuracy, identification of allowable mass limits and overloading
- Companies should have:
 - a) procedures to communicate with other CoR parties when overloaded trucks occur to prevent repeat offences
 - b) have issue resolution procedures to manage repeat offenders
- Grain harvest management schemes require data reporting to regulators, who can act on this data, including non-compliance to mass limits
- Truck rejections are not encouraged because trucks will be knowingly overloaded when they drive back on a public road.
- If truck cannot unload (due to quality, insects, or operational reasons) and must drive on public roads before it unloads, steps must be taken to minimise the distance that trucks drive on public roads.

2.4.3 Axle/axle group weights for grain

Overloaded axle groups impact vehicle stability and increase wear and tear on road surfaces.

Currently, bulk handler weighbridge systems are not set-up to measure, record and validate axle/axle group mass limits.

Bulk handler risk assessments classify axle weighing as something that is not reasonably practicable to do.

2.4.4 Weighbridge certification

Weighbridge accuracy is important to ensure accurate weights are known for trade purposes and prevent non-compliance to mass limits. Weighbridges used for trade must be re-verified in compliance with the [National Measurement Act](#) and the [National Trade Measurement Regulations](#).

Independent weighbridge certification specialist's complete re-verification as per National Measurement Institute (NMI) and manufacturer guidelines, or company policy. A verification mark is applied to weighbridges which meet these requirements. Certifications may also be kept on site.

In addition to formal weighbridge certifications, it is recommended simple tests are carried out on a regular basis to check the accuracy of weighbridges. For example, some companies do a daily or weekly weighbridge check with a known weight, such as a work vehicle, or a truck that has loaded at a different site. For good measure, records of these checks should be kept.

2.4.5 Trucks driving on public roads between load point and weighbridge

Trucks often drive on public roads between the load point and the nearest weighbridge when public roads separate them.

Sites with this issue must manage the associated risks to eliminate or minimise trucks knowingly driving on a public road weighing more than the legal mass limit.

2.4.6 Splitting trucks

Trucks often split in transit when they load as Type 1 Road Trains (truck code 28 or 91), or AB-triples (truck codes 88 and 96), and then split into semitrailers (truck code 12) and B-doubles (truck code 68). For example, triples and Road Trains often split at Toowoomba before driving to Brisbane.

Trucks that split in transit have a higher risk of overloading because the mass limit for the long combination is calculated based on the number of axles. When the truck splits, trailers loaded close to the maximum mass limit on the dolly can potentially exceed the mass limit because prime movers are heavier than the dolly, and less mass is permitted on the tandem drive group of a prime mover than the dolly.

To manage the risk, the second trailer setup should underload by the approximate difference between the weight of the prime mover drive group and the dolly. Additionally, the gross weights at the destination must be monitored for overloads so corrective actions can be taken when they occur.

2.5 Hygiene

Grain Trade Australia (GTA) have a Transport Code of Practice that details truck hygiene requirements. The key components of the code are summarised below:

- a) The goal of cleaning is to remove any contaminants (e.g. residual dust or chemicals) and to ensure the integrity of the grain to be loaded is not compromised.
- b) A carrier should keep a record of the commodities carried and the cleaning method used after each grain movement.
- c) Cleaning must be done in consideration of the applicable standards relating to the grain to be loaded and with regard to previous loads carried. If live stored grain insects have been detected, the truck requires removal and treatment to disinfest the transport unit.
- d) The main methods of cleaning are:
 - Sweeping or

- Compressed air
- Compressed air followed by steam/sanitizing/washing.
- e) It should be noted that sweeping with a broom is unlikely to remove contaminants such as dust, live stored grain insects and chemicals.
- f) The GTA code details materials that are excluded as prior loads to the cartage of grain.

2.6 Truck driver site inductions

It is good practice to provide drivers with a site safety induction prior to loading or unloading to make them aware of industry and site specific risks that may affect their health and safety.

2.6.1 Health and safety risks

Some of the key health and safety risks to be considered include:

- Manual handling and falls from height, both pose a serious safety risk to truck drivers when working on a receival site. To manage these risks, the following rules must be followed:
 - Climbing on or between trailers is not permitted
 - Trailers must be fitted with ground operated roll-over tarps
 - Receival sites do not provide trailer clean down facilities and trailers must be cleaned prior to arrival
 - Receival sites will not load trucks with residue from previous loads.
- Crush injuries from uncontrolled movement of trucks. To manage this risk trucks must be immobilised by:
 - Drivers must apply the appropriate truck brakes properly before getting out of the vehicle
 - Some bulk handlers require heavy vehicles to be fitted with handbrake warning systems and or require wheel chocks
 - NEVER attempt to re-enter a moving vehicle.

2.6.2 Roles and responsibilities

Truck drivers must operate their own vehicles, tipping equipment and tail gates. Tail gate chains must be fitted to all trucks.

Receival site staff will direct truck drivers to the appropriate load and unload points.

Specific training is required to operate load/unload points and equipment and under no circumstances should truck drivers operate receival site equipment, including pulling tarps.

2.6.3 PPE and other requirements

Personnel Protection Equipment (PPE) must always to be worn without exception when on receival sites. The PPE required is:

- Steel capped footwear (mandatory)
- High visibility clothing e.g. vest (mandatory)
- Safety glasses (recommended)
- Hard hat (recommended).

Other requirements to be considered include:

- Smoking is only permitted in designated area of a receival site. Smoking is prohibited in the confines of the driver's vehicle whilst on the receival site
- All receival sites have a maximum allowable speed limit of 15 km/h for vehicles while on site
- Truck drivers are to follow all reasonable directions from onsite staff and conduct themselves in an orderly and professional manner
- All injuries and dangerous occurrences are to be reported immediately to onsite staff
- Basic first aid equipment is available on site if required, please speak to onsite staff. The receival site manager is typically the site emergency contact.

2.7 Vehicle standards

2.7.1 Convertible trailers

Convertible trailers are flat bed trailers fitted with gates and tarps to allow storage of grain. Although they were once common, they are now uncommon in bulk grain.

Convertible trailers either have rams with a rear tailgate, or a non-tipping design without rams that allows the grain to pour off the side of the trailer.

Non-tipping trailers are very slow to unload, and grain spills are common, so most bulk handlers do allow them to unload at their sites.

Tipper convertible trailers are banned from some grain handler sites and care must be taken because these trailers can be longer than usual grain tippers, increasing the risk of the trailer rolling over when unloading.

Further information about GTSN member policies can be found on the GTSN member websites.

2.7.2 Tailgate chains

All grain tipper tailgates must be fitted with chains adequately engineered to control the tailgate when unloading. It is common practice for GTSN members to check these chains when unloading to ensure they comply with GTSN member safety compliance requirements.

GTSN members also commonly have policies where staff are not permitted to operate tailgate chains due to the potential safety risks involved.

2.7.3 High sided trailers

Grain load spouts are generally engineered to accommodate grain tippers to a maximum height of 1.8 metres.

Occasionally, high sided tippers from other industries will do bulk grain work. Care must be taken with these combinations because they may not fit under load spouts and they can be difficult to sample and unload.

3 Technical Information

This section includes information about truck configurations and the most common exceptions and conditions that allow trucks to load above the General mass limits (GML). There are a number of mass exceptions (also known as mass concessions) that apply as exceptions to GML, these include:

- Regulatory requirements and conditions e.g. tyre width, suspension type, steer allowances
- National Heavy Vehicle Accreditation Scheme (NHVAS) mass management accreditation
 - Concessional mass limits (CML)
 - Higher mass limits (HML)
- Notices and permits i.e. access authorisation
- Performance based standards (PBS)
- Grain harvest management schemes (GHMS).

More information on each of these mass exceptions and conditions will be discussed further throughout this Chapter and are detailed for each truck code in [Section 4](#).

3.1 Showing evidence of permits

Truck drivers can present paper copies of permits, or in electronic format on mobile smart phones or other portable electronic devices.

3.2 NHVR Online Tools

The NHVR offer a website and mobile phone app to lookup information about trucks. The mobile phone app gives more information, and it should be the preferred option to use.

Note that there can be a delay in truck registration being removed or renewed and the data being displayed on the app. If trucks show as being unregistered on either the app or the website, it should be confirmed on the state registration websites.

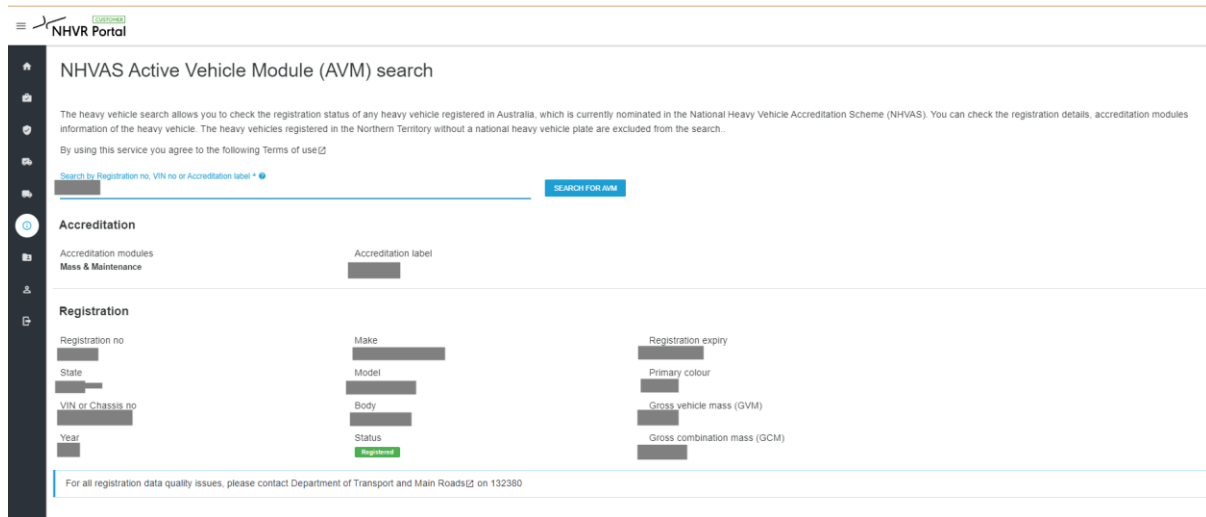
Figure 4: NHVR App logo in App Store



3.2.1 AVM Search

The NHVR has an [Active Vehicle Module \(AVM\) search](#) to check in real time if trucks have accreditation. This is a useful tool if there are concerns about the validity of stickers (see Figure 5).

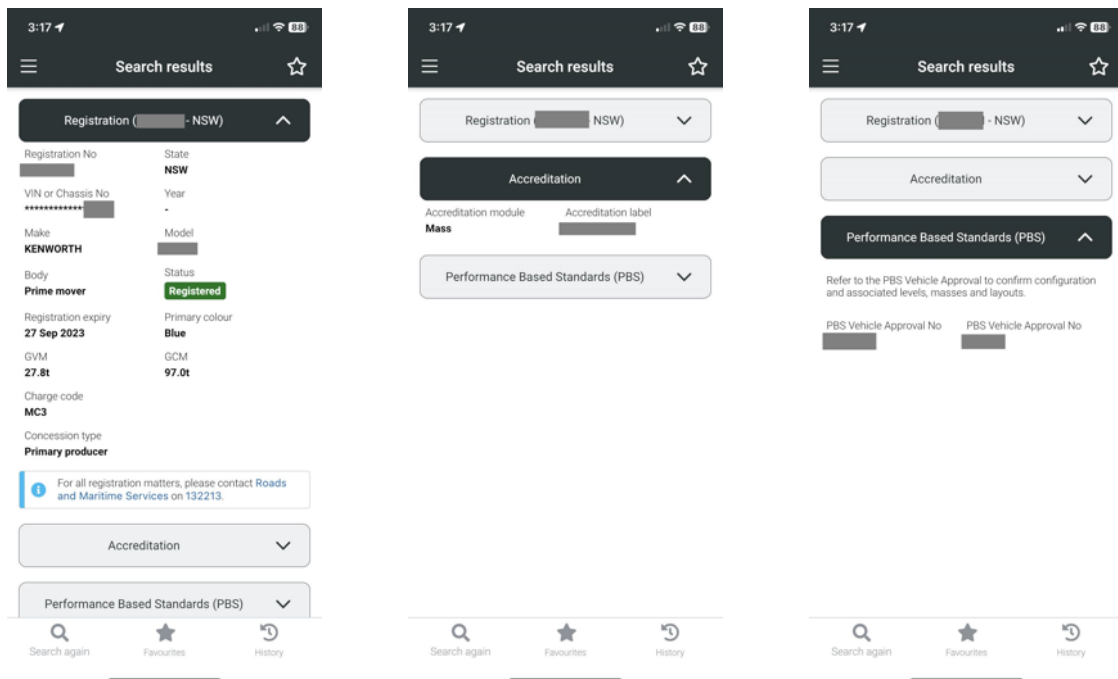
Figure 5: Screenshot of NHVR AVM website (with results of search blacked out)



3.2.2 Rego Checker App

The NHVR Rego Checker App is better than the AVM Search because it gives additional information beyond NHVAS Accreditation status including information about the truck (i.e. make, body, charge code) and if the vehicle has PBS Accreditation. Figure 6 shows how the information is presented in the app.

Figure 6: NHVR Rego Checker App Examples (with confidential information removed)



3.3 Truck length, heavy vehicle access and NHVR Access Permits

General access trucks have the following features:

- Less than 12.5 metres for a truck
- Less than 19.0 metres for a truck and trailer or articulated vehicle (combination)
- Less than 42.5 tonnes gross mass, except by permit e.g. non-PBS trucks with 3 or 4 axle dog trailers or 19 metre B-doubles.

In most areas where there are bulk grain movements, there is B-double access. Road train and AB-triples typically operate away from urban areas as permitted on the road network. In some instances, an access permit is required – see Figure 7: Common Truck types requiring NHVR access permits.

See Figure 8 for an example permit and what to look for.

For more information on heavy vehicle access see the Route Planner (also known as Journey Planner) on the NHVR website at www.nhvr.gov.au. Care must be taken when using the Route Planner because there can be a lag with it updating the map layers from the state websites, which are the legally enforceable network.

If a B-double, road train or AB-triple arrive at site without an access permit, they can split and deliver as a smaller combination, and then leave the as the smaller legal combination to eliminate a second off route breach.

Figure 7: Common Truck types requiring NHVR access permits




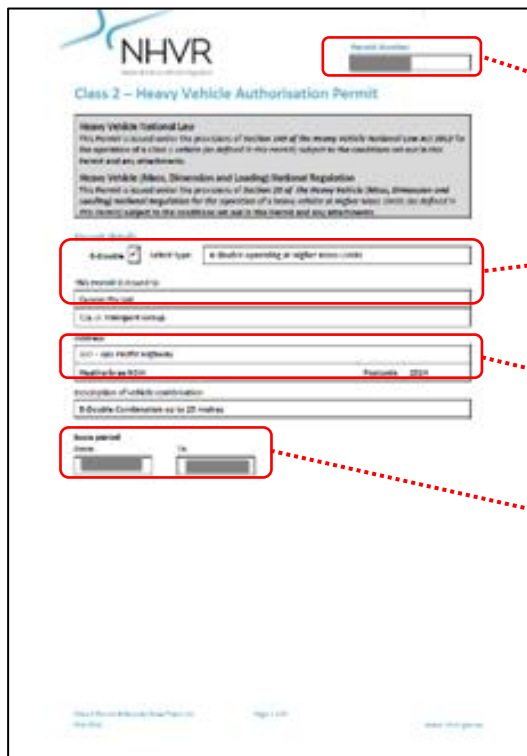
		26.0m	36.5m	53.5m
9 Axle B-double				
Type 1 Road trains and AB-triples				
Type 2 Road trains				

Figure 8: Example NHVR access permit on roads that are not gazetted



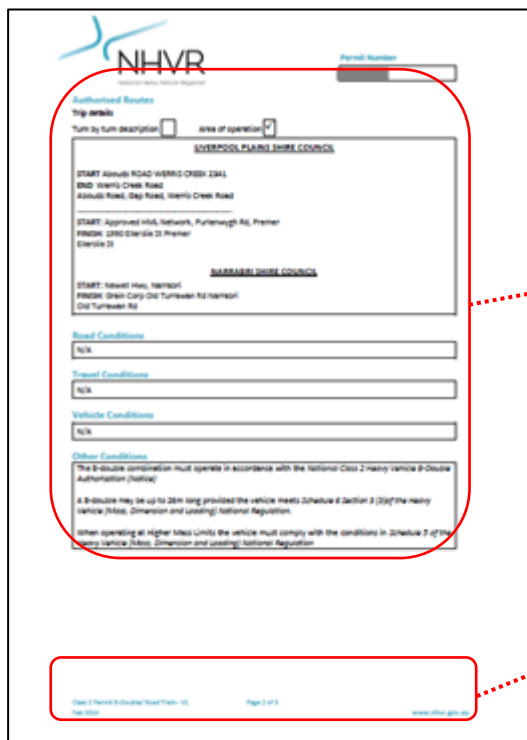
Note:

Enter the permit number into business information systems where possible to maintain a record of the permit number.

Check the vehicle registration or truck company name number matches the truck.

Check the vehicle combination matches what is listed here.

Check the from and to dates to ensure the permit is current.



Check the roads here.

Ensure all pages of the permit are provided to check special conditions.

3.3.1 Sharing Access Permits


Section 152 of the Heavy Vehicle National Law outlines how NHVR Access Permits can be shared between truck operators, and this is outlined in the Information Sheet about Class 2 permits and subcontracting published by the NHVR on 19 December 2018.

Key points GTSN members must be aware of about permit sharing:

- Drivers must hold a copy of the permit – electronic copies are OK
- The truck must meet the conditions of the permit – i.e. it must be the same truck code
- Trucks operating as PBS Vehicles that reference specific Vehicle Approvals and must hold the permit in their own name

For further information, please refer to the NHVR Information Sheet (see Figure 9)

Figure 9: NHVR Information Sheet Class 2 permits and subcontracting



National Heavy Vehicle Regulator

19 December 2018

Information Sheet

Class 2 permits and subcontracting

Purpose

To provide information to drivers and operators about passing a permit to another relevant party for the purpose of further subcontracting.

Keeping a copy of the permit

The following are clauses are from Section 152 of the *Heavy Vehicle National Law* (HVNL).

- (1) The driver of a class 2 heavy vehicle who is driving the vehicle under a class 2 heavy vehicle authorisation (permit) must keep a copy of the permit for the authorisation in the driver's possession
- (2) If the driver of a class 2 heavy vehicle is driving the vehicle under a class 2 heavy vehicle authorisation (permit) granted to a relevant party for the driver and the relevant party has given the driver a copy of a permit for the purpose of subsection (1), the driver must, as soon as reasonably practicable, return the copy to the relevant party if the driver stops working for the relevant party.

Explanatory note for (2):

- a) A relevant party who is the permit holder may give the driver a copy of the permit; and
- b) The driver must return the copy to the relevant party as soon as the driver stops working for the relevant person.

What is a relevant party?

A **relevant party**, for the driver of a class 2 heavy vehicle, means—

- a) an employer of the driver if the driver is an employed driver; or
- b) a prime contractor of the driver if the driver is a self-employed driver; or
- c) an operator of the vehicle if the driver is making a journey for the operator.

What is subcontracting?

A contract for a company or person to do work for another company as part of a larger project.

Can my class 2 permit be passed onto a relevant party for further subcontracting?

The permit holder may only provide copies of a permit to relevant parties. The permit holder cannot authorise another party to issue copies on their behalf.

Relevant parties must stop using a copy of the permit when not directly working for the permit holder.

Important to note:

- A driver who is a subcontractor may operate under a permit for so long as the driver is doing work for the prime contractor (permit holder).
- The driver must obtain the permit from the permit holder.
- A heavy vehicle operating under contract, including subcontract, may obtain network access under a permit held by a person who is the contracting party, providing that:
 - a. the vehicle meets all the requirements of the permit; and
 - b. the driver of the vehicle carries a copy of the permit while working for the permit holder.
- As the permit holder cannot authorise another party to give out permits on their behalf. The copy of the permit must come from the permit holder. However, this is NOT a function of the contracting or subcontracting arrangement itself.
- Subcontracting does not apply to Class 1 and 3 permits. These permits are allocated to specific vehicles with registration details on the permit.

For more information:
 Subscribe: www.nhvr.gov.au/subscribe
 Visit: www.nhvr.gov.au
 Phone: 1300 MYNHVR* (1300 696 487)
 Email: info@nhvr.gov.au
© Copyright National Heavy Vehicle Regulator 2018, creativecommons.org/licenses/by-nc/3.0/au
 Disclaimer: This fact sheet is only a guide and should not be relied upon as legal advice.
 *Standard 1300 call charges apply. Please check with your phone provider.

www.nhvr.gov.au 1 of 1

3.4 GVM, GCM and legal mass limits

All trucks have a Gross Vehicle Mass (GVM), Gross Combination Mass (GCM) and a Legal Mass Limit. It is important trucks know all of these mass limits when operating, and the lower of the three applies.

For example, the:

- GVM for a 3-axle rigid truck is 22.5 tonnes (truck only)
- GCM when this truck is towing a 4 axle dog trailer is 42.5 tonnes (truck and trailer), or
- 50.0 tonnes if it is operating under the Class 3 Truck and Dog Notice (truck and trailer).

Care must be taken with older model trucks because the GVM or GCM can be lower than the regulated legal mass limit. For example, under-powered older model prime movers towing road train combinations must be careful because they are not designed to pull heavy combinations.

Case studies

- a) If the manufacturer's GVM for a 3 Axle Rigid Truck is 24 tonnes and the regulated mass limit is 22.5 tonnes, the 22.5 tonne maximum legal mass limit applies (see truck code 9)
- b) If the manufacturer's GCM for a prime mover is 130 tonnes (road train rated) and it is towing two (2) by 3 axle trailers joined with a 2 axle dolly, the maximum legal mass limit is 79.00 tonnes—being the general mass limit (see truck code 28).

Due to difficulties in identifying the manufacturer's GVM and GCM, grain handlers typically do not check for this, and only check the legal mass limit specified by the Regulator. Truck operators need to be aware of these limits and ensure they do not exceed them.

Steer allowances

3.4.1 0.5 tonne steer allowance

Trucks with the following safety and environmental features weigh more, so mass limit regulations allow these trucks an extra 0.5 tonne on the legal mass limit on the steer axle i.e. 6.5 tonnes instead of 6.0 tonnes.

- Trucks with a GVM over 15 tonnes fitted with specific technologies, including:
 - An engine complying with ADR 80/01 (Euro IV).
 - Front under-run impact protection (FUPs) that meets UN ECE Regulation No.93 or ADR 84; and
 - Cabin strength that meets the requirements of UN ECE Regulation No.29.
- These trucks are typically built from 2008 onwards.

The most obvious feature of a truck that qualifies for the 0.5 tonne steer allowance is the Front Under-run Protection System (FUPs) bar, which is designed to stop other vehicles from going underneath the truck in a collision. FUPs bars are typically low to the road and trucks fitted with FUPs bars (see Figure 10) will also have compliance plates (see Figure 11).

Figure 10: Truck fitted with FUPs bar



Figure 11: FUPs bar compliance plates



3.4.2 1.1 tonne steer allowance for Road Trains and AB-triples

The National Class 2 Road Train Authorisation Notice 2020 (No.2) allows road train rated prime movers fitted with steer tyres 375mm or wider to get an additional 0.6 tonnes steer allowance (mass concession) when the conditions are also met that apply to the 0.5 tonne steer allowance, giving a total 1.1 tonne additional mass limit on the steer axle i.e. 7.1 tonnes instead of 6.0 tonnes.

Road trains and AB-triples are the most common grain trucks where the 1.1 tonne steer allowance applies.

3.4.3 1.1 tonne steer allowance for Semi-Trailers and B-doubles

Road train rated Semi-Trailers and B-doubles fitted with steer tyres 375mm or wider can also apply the 1.1 tonne steer concession under the *National Class 3 Road Train Prime Mover Mass and Dimension Exemption Notice 2021 (No.1)*.

Other features of the notice include:

- Longer combinations, 27m B-double and 20m Semitrailer
- Operate with a dolly at the back of the B double or semitrailer, noting that when weighing trucks with un-laden dollies, these must be left off the weighbridge when weighing the truck as illustrated in Figure 12. This combination is limited to 26m length.

Figure 12: Semitrailer and dolly weighed with dolly off the weighbridge



Care must be taken for Semi-Trailers and B-doubles applying the 1.1 tonne steer concession because the networks where it applies vary by state as per Figure 13 below.

Figure 13: State networks for Semi-Trailers and B-double for the 1.1 tonne steer allowance

	Qld	NSW	Vic	SA
Semi-Trailer	Queensland 25/26 metre B-double Network	New South Wales 25/26 B-double GML Network	Victoria B-double Network	South Australia PBS Level 1A Network
B-double	Queensland 25/26 metre B-double Network	New South Wales GML Type 1 A-double Network	Victoria Road Train Network	South Australia 26m B-double (GML) Network

Networks where steer allowances apply are included in the footnotes on the individual pages of the truck book as per Figure 14 below.


Figure 14: Code 12 Example of Networks where 1.1 tonne steer applies

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GTSN Truck Book

Semitrailers: Common 6 Axle Semitrailer

12



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	42.50	-	43.50	45.50	-	✓	✓ ⁴⁶				45.70
NSW											44.63 ⁴⁷
Vic		43.00									44.60
SA		-									✓ ⁴⁸

⁴⁶ Applies on the B-Double network or greater only

⁴⁷ Trucks with NHVAS Mass get an additional 0.2 tonnes.

⁴⁸ Applies on the PBS 1A network or greater only

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3.4.4 Checking for Super Single Types for the 1.1 tonne steer concession

Tyre width is difficult for bulk handlers to identify because it is a safety risk for the weighbridge operator to physically inspect the tyre to see the width when the truck is on the weighbridge, therefore it is reasonably practicable to rely on the truck driver's direction about the width of tyres they operate. See Figure 15 for a comparison of tyre widths.

Trucks operating the 1.1t steer allowance must be careful to not exceed the GCM, because for some trucks this is 108t and the steer allowance can cause the truck to exceed the GCM.

Figure 15: Comparison of tyre sizes



To physically confirm the tyre width, details are written on the tyre side wall. The first 3 digits should start with 375 or higher. For example, 375/90R22.5 indicates the tyre width is 375mm and is OK. Care must be taken when checking tyre side walls because it can be difficult for truck drivers to see pedestrians so close to the truck.

3.5 Concessional mass limits (CML)

Trucks that are part of the National Heavy Vehicle Accreditation Scheme (NHVAS) for mass management are permitted to load to the Concessional mass limit (CML). These trucks will display a sticker (accreditation label) indicating they are accredited – see Figure 16: NHVAS mass management sticker, look for the blue “Mass Management” banner on the sticker. The truck operator will have a NHVAS certificate of accreditation showing accreditation in the mass management module.

Currently, older style accreditation stickers (see Figure 16) are being superseded and replaced by new ones with the NHVR logo. The stickers must be displayed on the driver's side of the cabin.

The sticker has a permit number that should be documented in business information systems when loading to CML. Sticker numbers are unique to each vehicle.

A condition of NHVAS Mass is the truck must display the NHVAS mass sticker, which means drivers cannot claim NHVAS Mass accreditation with the paper certificate (see Figure 17), or by requesting an online search.

Figure 16: NHVAS mass management sticker



Vehicle label dimensions: 90mm x 120mm

Figure 17: Example NHVAS Certificate of Accreditation (confidential information blacked out)



3.6 Higher mass limits (HML)

HML is a mass exception under the HVNL which allows higher mass limits on approved routes for particular vehicles or vehicle combinations dependent on other conditions being met (e.g. GPS tracking and/or road friendly suspension may need to be fitted to the vehicle).

Trucks operating at HML are potentially higher risk combinations from a legal mass limit perspective, so care should be taken when dealing with these combinations to ensure they have the correct permits to operate at the heavier weight.

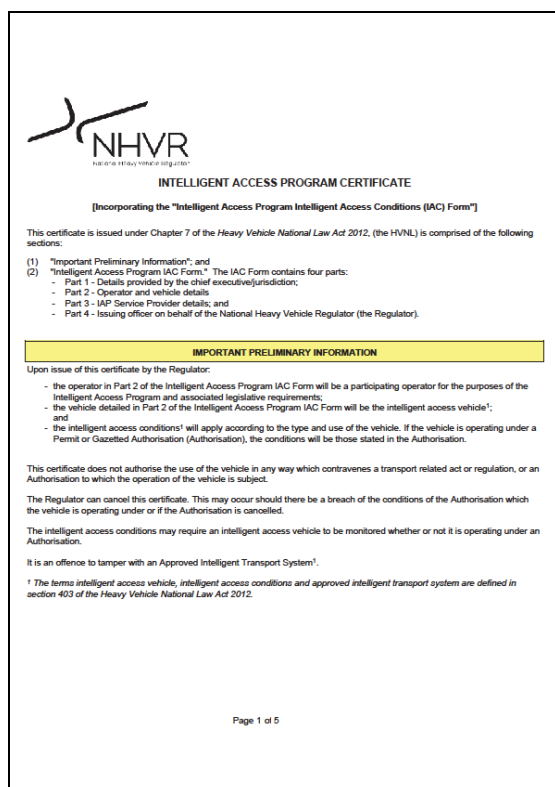
Access for these combinations is common on state and federally owned routes, with access being less common on council owned roads that grain storage facilities are commonly located on. When access is not permitted, trucks must have a NHVR access permit as outlined in 3.6.1 HML access permits.

HML requirements differ by state, for example:

- All trucks operating HML must be compliant with NHVAS mass. See Figure 16: NHVAS mass management sticker;
- In Victoria and South Australia, trucks only require NHVAS mass management to operate at HML, so HML loading is much more common than CML loading
- In Qld and NSW:
 - GPS tracking is required to operate to HML, which means the vehicle must be fitted with either:
 - An Intelligent Access Program (IAP) and present a NHVR IAP Certificate (see Figure 18), or
 - Telematics Monitoring Application (TMA) GPS Tracking Device and present a TMA certificate (see Figure 22).
 - Most of these certificates do not have an expiry date

- For trucks operating IAP:
 - As per the *Queensland Higher Mass Limits Declaration 2022 (No.1)*
 - From 1 December 2022, TMA replaces IAP in Qld and all new Qld trucks applying for HML in Qld will be issued a TMA Certificate
 - IAP can be used in Qld to operate to HML until 1 June 2024, after this date, trucks must use TMA to operate to HML
 - When checking the certificate, it is important that the details shown in Figure 19, to ensure they match the details of the truck, and the permit has a valid expiry date.
 - Note: Drivers may present a NHVR issued Interim Intelligent Access Condition (IAC) (see Figure 21) and this does not allow HML operation. These certificates are valid for 3 months and are setup to allow truck companies to install IAP equipment and enter into an agreement with an IAP provider.
- NSW Trucks operating IAP must have a current NSW Certificate of Enrolment Intelligent Access Program (IAP) certificate (see Figure 20), this certificate is not required with TMA.

Figure 18: NHVR IAP Certificate



NHVR
NATIONAL HEAVY VEHICLE REGULATOR

INTELLIGENT ACCESS PROGRAM CERTIFICATE
[Incorporating the "Intelligent Access Program Intelligent Access Conditions (IAC) Form"]

This certificate is issued under Chapter 7 of the Heavy Vehicle National Law Act 2012. (the HVNL) is comprised of the following sections:

(1) "Important Preliminary Information"; and
 (2) "Intelligent Access Program IAC Form." The IAC Form contains four parts:
 - Part 1 - Details provided by the chief executive/jurisdiction;
 - Part 2 - Operator and vehicle details
 - Part 3 - IAP Service Provider details; and
 - Part 4 - Issuing officer on behalf of the National Heavy Vehicle Regulator (the Regulator).

IMPORTANT PRELIMINARY INFORMATION

Upon issue of this certificate by the Regulator:

- the operator in Part 2 of the Intelligent Access Program IAC Form will be a participating operator for the purposes of the Intelligent Access Program and associated legislative requirements;
- the vehicle detailed in Part 2 of the Intelligent Access Program IAC Form will be the intelligent access vehicle¹; and
- the intelligent access conditions¹ will apply according to the type and use of the vehicle. If the vehicle is operating under a Permit or Gazetted Authorisation (Authorisation), the conditions will be those stated in the Authorisation.

This certificate does not authorise the use of the vehicle in any way which contravenes a transport related act or regulation, or an Authorisation to which the operation of the vehicle is subject.

The Regulator can cancel this certificate. This may occur should there be a breach of the conditions of the Authorisation which the vehicle is operating under or if the Authorisation is cancelled.

The intelligent access conditions may require an intelligent access vehicle to be monitored whether or not it is operating under Authorisation.

It is an offence to tamper with an Approved Intelligent Transport System¹.

¹ The terms intelligent access vehicle, intelligent access conditions and approved intelligent transport system are defined in section 403 of the Heavy Vehicle National Law Act 2012.

Page 1 of 5

Notes:

'IAP identifier' is what should be entered into business information systems.

From 1 December 2022, new trucks in Qld are no longer issued IAP Certificates and must operate with TMA Certificates.

Trucks in Qld can operate IAP Certificates until 1 June 2024.

The document could have the Qld watermark and logo – this is ok.

All permits now have the NHVR logo and truck operators have been emailed electronic copies of this permit.

Figure 19: NHVR IAP certificate (cont.) with truck details

PART 2 - Details of the Transport Operator applying for this IAC

Transport Operator name: [REDACTED]
 Company name: [REDACTED]
 ABN: [REDACTED]
 ACR: [REDACTED]

Postal address:
 PO BOX 723
 BROWNS PLAINS
 QLD 4118

Equip/acc:
 Phone (Bus hours): [REDACTED]
 Phone (After hours): [REDACTED]
 Fax: [REDACTED]
 Email: [REDACTED]

Nominated officer for the Transport Operator:
 Name: [REDACTED]
 Title/Position: PBS AND PERMITS OFFICER
 Contact phone: [REDACTED]

Make:	Model:	Body Type:	Registration No:	State:
KCMV	T855	PRIVATE MOVER	[REDACTED]	QLD

Vehicle Identification Number (VIN) OR Non-VIN identifier: (if no VIN available)
 VIN: [REDACTED]

Jurisdictional Authorisation (Interim IAC)
 Interim IAC issue date: 10-05-14 21 November 2018
 Interim IAC Lapse date: 10-05-14 19 February 2019
 (This Interim IAC will lapse if Part 3 is not received from the IAP-OP by this date)

Authorised by: IAC ADMINISTRATOR
 Title/Position: IAC ADMINISTRATOR
 Phone: 1300768427

Comments/Other Information:

Note:
 Check the dates and registration plate on this section of the

Figure 20: RMS NSW IAP Certificate



NSW CERTIFICATE OF ENROLMENT INTELLIGENT ACCESS PROGRAM (IAP)

Certificate Number: [REDACTED]
 Expires: [REDACTED]

Registered Operator Name: [REDACTED]
 Vehicle Registration Number: [REDACTED]
 State of Registration: [REDACTED]
 Vehicle Make: [REDACTED]
 VIN: [REDACTED]

IAP Scheme:
 GML AD single
 HML AB single

Note: This Certificate of Enrolment indicates that this vehicle is now monitored under IAP in NSW for the above scheme(s) and must be carried in the cabin. Prior to operating on NSW roads, an access permit under the Heavy Vehicle National Law must be obtained and carried in the cabin if this vehicle cannot operate in NSW under a relevant licence or NSW FPM Declaration.

I hereby certify that the vehicle identified above is enrolled in the Intelligent Access Program in New South Wales.

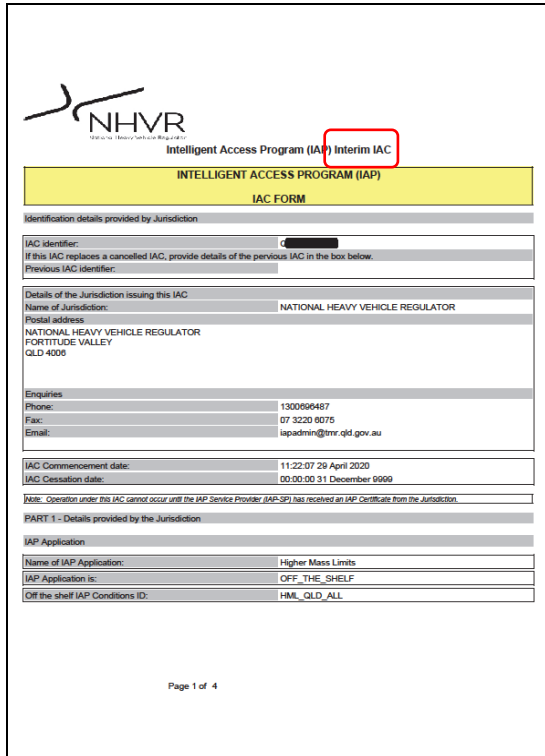
[Signature]
 Vincent Wong
 Senior Officer
 Vehicle Telematics Operations

Issued on behalf of the Roads and Maritime Services of New South Wales

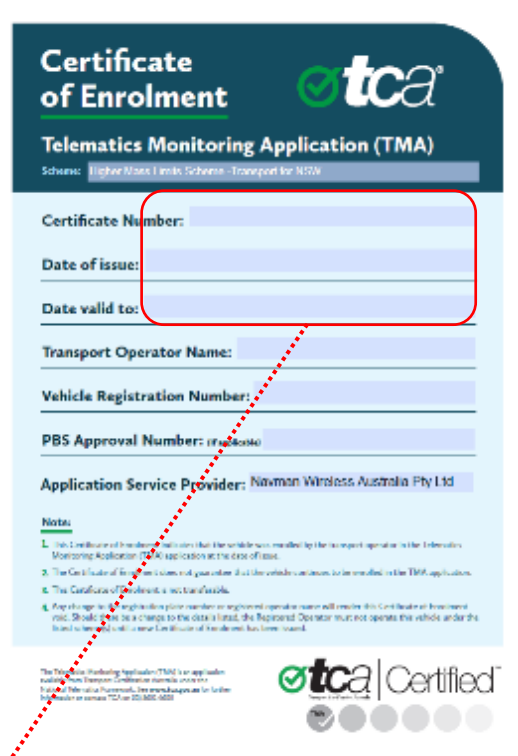
Figure 21: An NHVR issued Interim Intelligent Access Condition (IAC)

Figure 22: Telematics Monitoring Application Certificate

Note: look for 'Interim' because this is not a valid permit.



The form is titled 'Intelligent Access Program (IAP) Interim IAC' and 'INTELLIGENT ACCESS PROGRAM (IAP) IAC FORM'. It includes sections for identification details, jurisdiction information (National Heavy Vehicle Regulator), contact details, and application specifics. A red box highlights the 'Interim IAC' text.



The certificate is titled 'Certificate of Enrolment' and 'Telematics Monitoring Application (TMA)'. It includes fields for Certificate Number, Date of issue, Date valid to, Transport Operator Name, Vehicle Registration Number, PBS Approval Number, and Application Service Provider. A red box highlights the 'Date of issue' and 'Date valid to' fields. A red dotted arrow points from this box to the text below.

Check the registration number, expiry date (if missing, there is no expiry) and record the permit number in systems where possible.

3.6.1 HML access permits

Although HML access is common on state and federal roads, it is less common on council owned roads. Care must be taken to understand HML access requirements at sites handling bulk grain that are on council owned roads.

Trucks loading to HML that have to drive on non-HML roads must present an NHVR access permit that lists all the roads required to get the truck from the HML road network to the loading location – see Figure 8: Example NHVR access permit on roads that are not gazetted. These are uncommon and care must be taken.

3.6.2 Qld 500 metre operation off the National Land Transport Network (NLTN)

In Qld, the [Queensland Higher Mass Limits Declaration 2022](#) allows HML trucks to operate up to 500 metres off the NLTN for the vehicle being used. For example, a semi-trailer, B double or Road Train can operate 500 metres off the HML NLTN. Please note the supporting document for this notice: [Queensland Higher Mass Limits Operator's Guide](#) (see Figure 23).

Care must be taken when operating under the HML Declaration because access it only applies:

- a) to the approved HML network,
- b) only on parts of an approved vehicle type network (i.e. General access/B-double/road train network) that is within 500m of the NLTN
- c) it does not apply to all HML roads, or to parts of an approved combination network that is more than 500m from the National Land Transport Network), and
- d) In grain operating areas, applicable NLTN roads include the Warrego, Gore and New England Highways (see Figure 24).

A NHVR access permit is required to operate more than 500 metres off the NTLN.

Figure 23: Queensland Higher Mass Limits Operator's Guide to Queensland Higher Mass Limits Declaration 2022

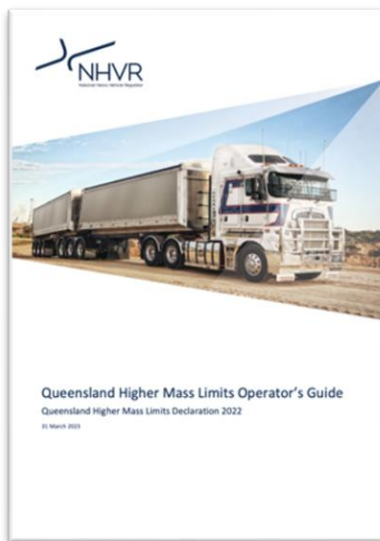
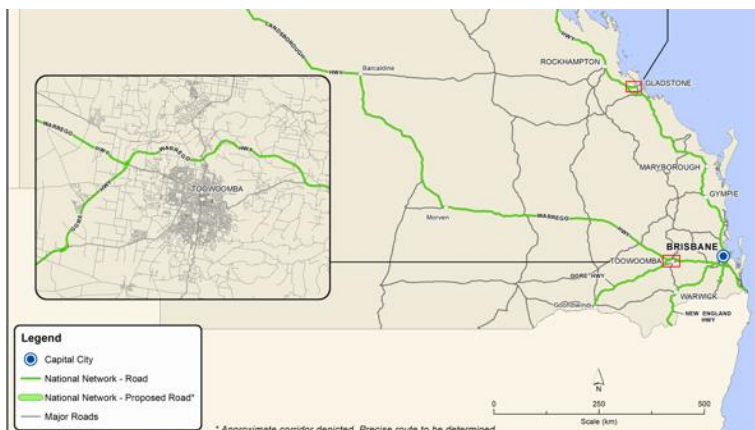


Figure 24: National Road Network Map (Qld)



3.7 Performance Based Standards (PBS)

PBS trucks are longer, heavier, or higher than ‘standard’ truck designs specified under the Heavy Vehicle (Vehicle Standards) National Regulation.

In grain, the most common PBS trucks are truck and dog configurations and road trains operating in areas where road trains are not typically permitted to operate.

To determine the mass limit of a PBS truck, the NHVR Vehicle Approval and Access Permit or Notice needs to be used in conjunction, where the lower mass limit applies.

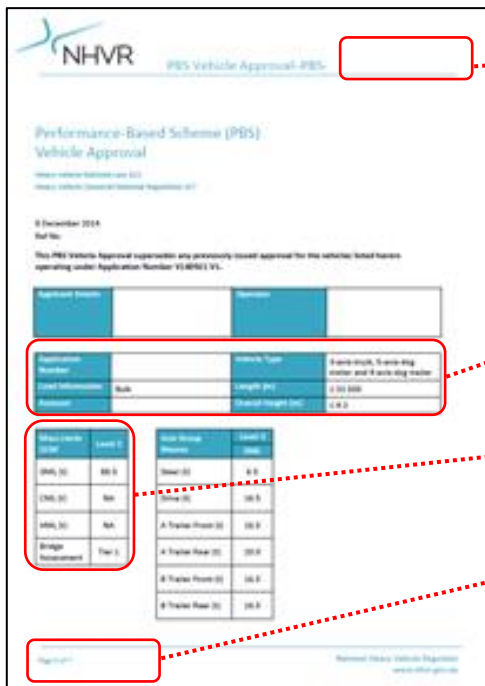
PBS trucks will often have NHVAS mass management accreditation label – see Figure 16: NHVAS mass management sticker. Trucks operating at HML may also require GPS tracking and must hold either an IAP or TMA certificate, refer section 3.6 Higher mass limits (HML).

All trucks operating as PBS must have a NHVR Vehicle Approval, which will include any specific information for that truck – see Figure 25. The purpose of the Vehicle Approval is to state that the truck is engineered to operate on public roads.

From a compliance perspective, the Vehicle Approval will also list the maximum GML, CML and HML that the truck configuration can operate to.

Trucks can only operate as PBS trucks once they have their PBS Access permit, which may be either a Gazette notice or an NHVR Access Permit.

Figure 25: NHVR PBS Approval



Note:

“Vehicle Approval” starting with “VA” is here and document in business systems where possible to keep a record of the number

Check the vehicle matches the details described here.

Check the maximum GML, CML and HML listed here.

Check all pages of the permit for any special restrictions.

NHVR PBS access permits are the most common type of PBS access – see Figure 8: Example NHVR access permit on roads that are not gazetted. Care needs to be taken with PBS access permits because road access can be limited and the maximum PBS weights from the vehicle approval are often restricted to specific routes during specific times.

3.8 National Class 2 PBS Level 1 & 2A Truck and Dog Trailer Authorisation Notice

The National Class 2 PBS Level 1 & 2A Truck and Dog Trailer Authorisation Notice 2022 (No.1) (see Figure 26) allows trucks with 3, 4 and 5 axle dog trailers to operate on the PBS 2A network with a NHVR PBS Vehicle Approval only (see Figure 25: NHVR PBS Approval).

Detail about the specific mass limits and permits is included on the pages for these truck codes by selecting the truck code number.

16		4 Axle Twin Steer Rigid Truck
22		4 Axle Tri Drive Rigid Truck
55		4 Axle Twin Steer Rigid Truck and 3 Axle Dog Trailer (PBS)
73		4 Axle Tri Drive Rigid Truck and 4 Axle Dog
76		3 Axle Rigid Truck and 6 Axle Dog Trailer (PBS)
87		4 Axle Twin Steer Rigid Truck and 5 Axle Dog Trailer (PBS)

3.9 Queensland Class 2 Performance Based Standards A-Double (Toowoomba to Port of Brisbane) Authorisation Notice

The Queensland Class 2 Performance Based Standards A-Double (Toowoomba to Port of Brisbane) Authorisation Notice 2019 (No.1) (see Figure 27) allows 30 metre 11 and 12 Axle A-doubles to operate into the Port of Brisbane with a NHVR PBS Vehicle Approval (see Figure 25: NHVR PBS Approval) and a HML GPS Tracking System (see 3.6 - Higher mass limits (HML)). Note that maximum mass is 85.0 tonnes, which is the HML 11 Axle mass limit excluding steer allowances, so trucks may need to underload when loading at country locations.

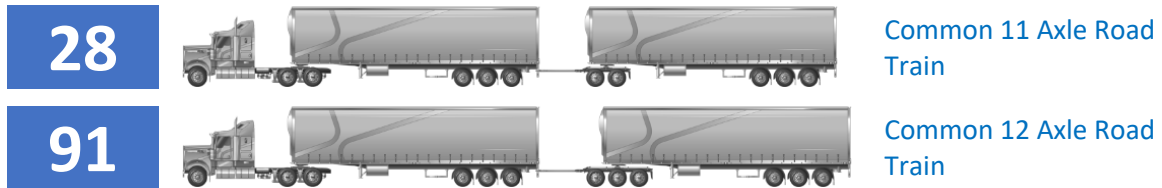
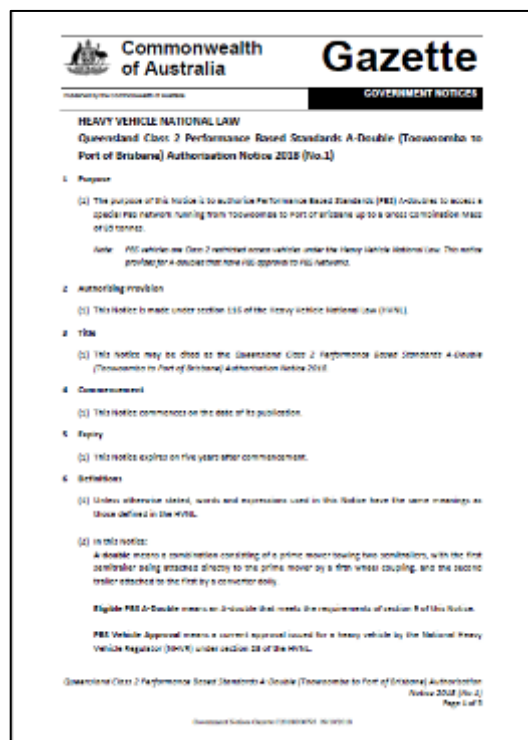
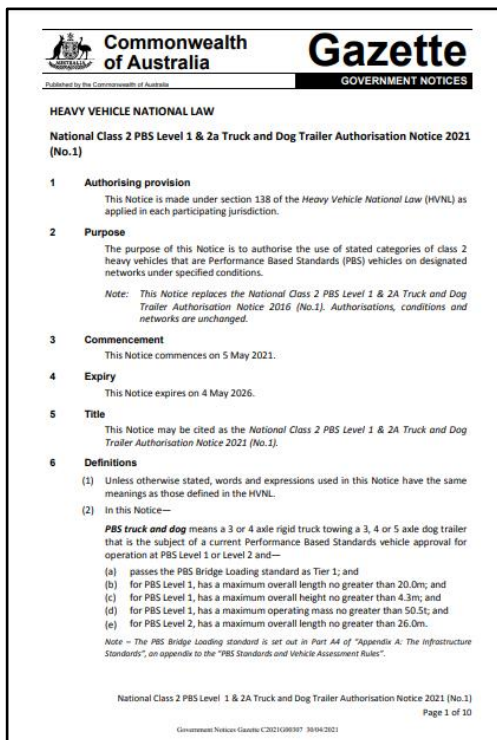


Figure 26: National Class 2 PBS Level 1 & 2A Truck & Dog Trailer Authorisation Notice (No.1)

Figure 27: Queensland Class 2 PBS A-Double (Toowoomba to Port of Brisbane) Authorisation Notice 2019 (No.2)



3.10 National Class 2 Performance Based Standards (High Productivity) Authorisation Notice

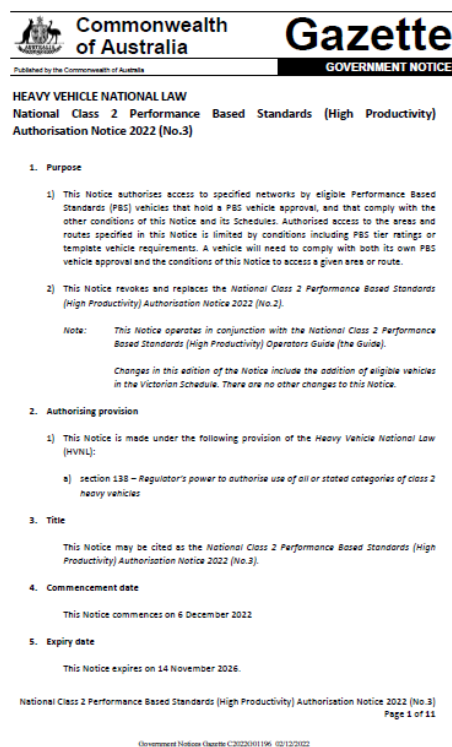
The National Class 2 Performance Based Standards (High Productivity) Authorisation Notice 2022 (No.3) is a wide-ranging notice that improves access to the road network for grain trucks on the PBS Networks in NSW and Victoria (see Figure 28). It does not currently provide access on the Queensland or South Australia road networks.

Trucks operating under the notice must have a PBS Vehicle Approval (see Figure 25), and may also require a NHVR Access Permit (see 3.3 Truck length, heavy vehicle access and NHVR Access Permits) and GPS Tracking (see 3.6 – Higher mass limits (HML)).

Access for trucks operating under this notice is different between NSW and Victoria, and the common applications for grain trucks is included below.

Last mile issues are common with these trucks to grain sites and care must be taken to ensure access is possible to the site.

Figure 28: National Class 2 Performance Based Standards (High Productivity) Authorisation Notice 2022 (No.3)



3.10.1 NSW

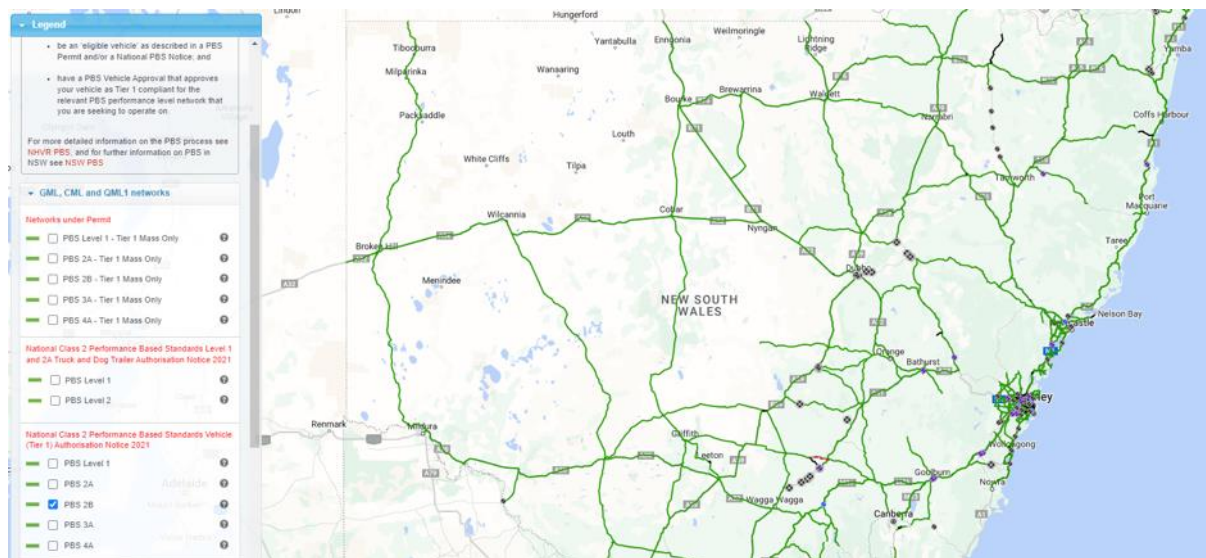
Although the notice applies to quad axle groups, these are uncommon in the grain industry, so the notice only applies to 30 metre 11 Axle A-doubles. The notice specifies it only applies to 2 axle dollies, so 12 Axle A-doubles are unable to operate under the notice.



The trucks are permitted to operate on the PBS 2B network only (see Figure 29). This data does not populate on the NHVR journey planner, and access must be checked directly on the Transport for NSW website: <https://roads-waterways.transport.nsw.gov.au/business-industry/heavy-vehicles/maps/performance-based-standards/map/index.html>.





The most common application of the notice for grain trucks is for trucks delivering to ports and domestic end users.

Figure 29: NSW PBS 2B Road Network on the Transport for NSW Website



3.10.2 Victoria

11 and 12 axle 30 metre A-doubles, and 14 and 15 Axle AB-triples can operate in Victoria under the notice.

28		Common 11 Axle Road Train
91		Common 12 Axle Road Train
88		Common 14 Axle AB-triple Road Train and 2 Axle Dolly
96		15 Axle AB-triple Road Train and 3 Axle Dolly

All maps are published on the VicRoads website at <https://www.vicroads.vic.gov.au/business-and-industry/heavy-vehicle-industry/heavy-vehicle-map-networks--in-victoria/cl2-pbs-hpvf>.

To operate these trucks, they must meet the following conditions:

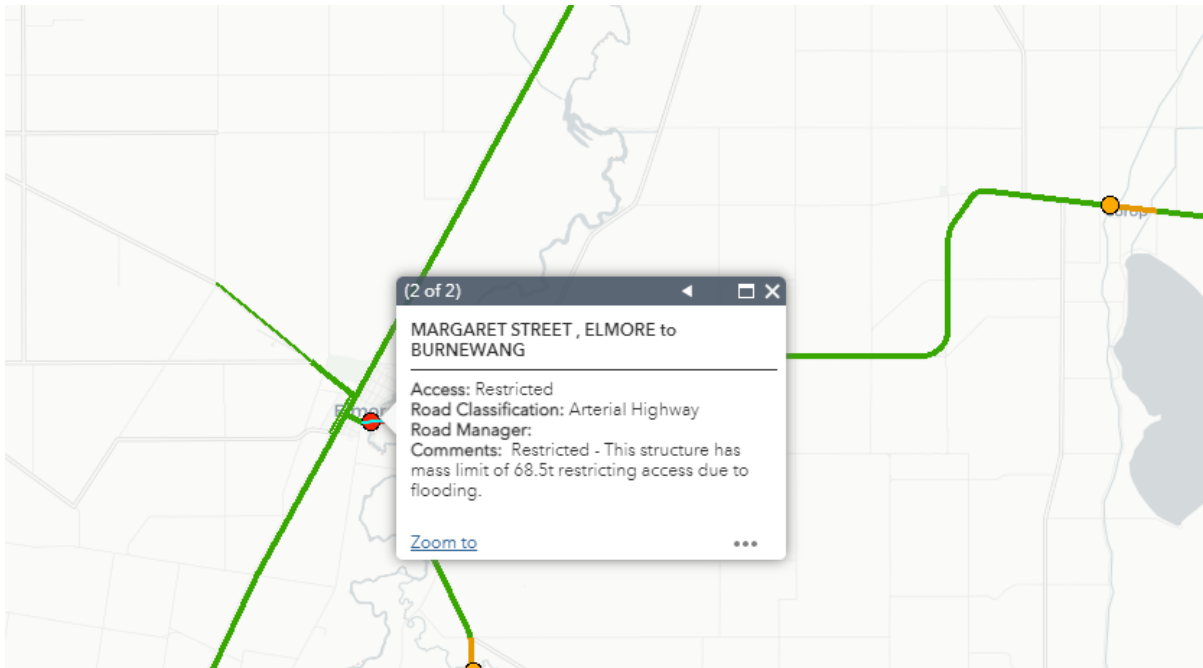
- Have a NHVR PBS Approval that meets the requirements of the Notice – see Figure 25: NHVR PBS Approval
- Intelligent access program with one or both of the following approved intelligent transport systems, approved by Transport Certification Australia (TCA):
 - On Board Mass Management Category B (OBM B); or
 - On Board Mass Management Category C (OBM C)
- Enrolled in and comply with one or both of the following approved intelligent transport systems, approved by Transport Certification Australia (TCA):
 - Intelligent Access Program (IAP), or
 - Telematics Monitoring Application (TMA)

A risk with the PBS networks is there are lower mass limits (usually due to bridges) throughout the network, marked with orange and red dots on the VicRoads PBS maps. It is difficult for GTSN members to know and understand these mass limits because trucks drive different routes with different permits due to these lower mass limits. Therefore, GTSN members apply mass limits at their specific load or unload point, and truck operators must manage the route mass between origin and destination.

The TMA Certificate (see Figure 22: Telematics Monitoring Application Certificate) does not specify if trucks have on board mass fitted and it is not possible to identify this. Therefore, GTSN members must rely on the driver declaration if they operate under the notice.

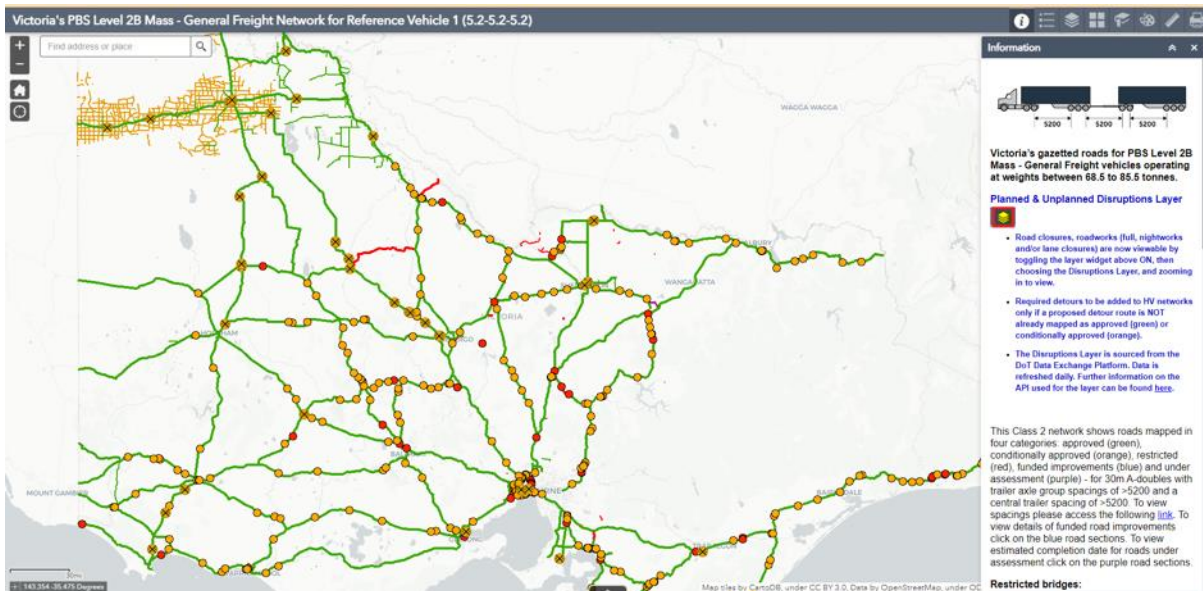
Due to the restrictions with the notice, many trucks operate under a NHVR access permit instead of operating under the notice. The purpose of the NHVR access permits is to allow operators time to install the GPS tracking systems required under the notice.

Figure 30: Restricted Access Mass Limits on the Victorian Access Maps



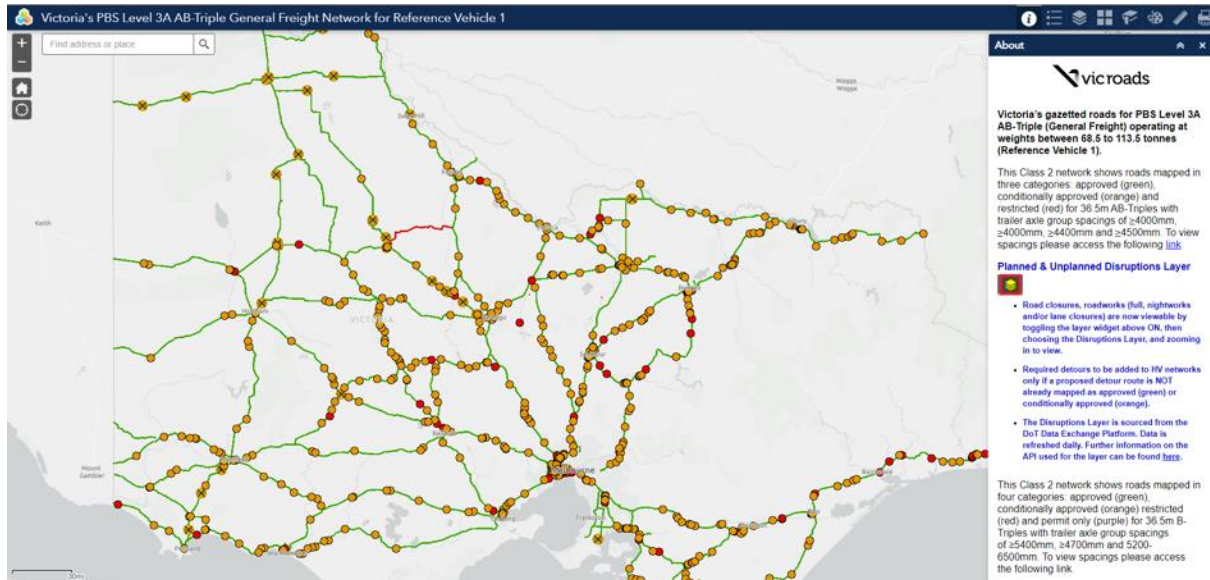
A-doubles operate on the PBS Level 2B Mass – General Freight network. Access on this network is generally good, and GTSN members are working with VicRoads to address last mile issues across the network.

Figure 31: Victoria PBS Level 2B Mass - General Freight Road Network



AB-triples operate on the PBS Level 3A General Freight – AB-triple (up to 36.5m) network. Although some sections of this network allow full AB triple HML 113.50 tonne mass, entire journey access is extremely limited and grain trucks are not commonly operating in Victoria under this notice. As network access improves, utilisation of these trucks will increase due to the safety, productivity, and environmental benefits through the high payloads.

Figure 32: PBS Level 3A General Freight – AB-triple (up to 36.5m) Network



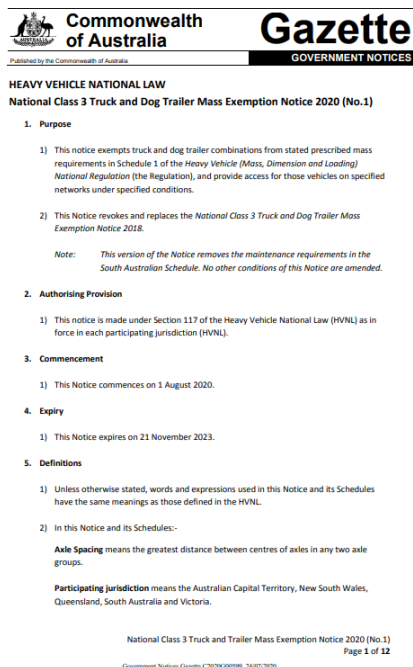
3.11 National Class 3 Truck and Dog Trailer Mass Exemption Notice

The following combinations can operate under heavy weights with the National Class 3 Truck and Dog Trailer Mass Exemption Notice 2020 (No.1), see Figure 33.

Figure 33: National Class 3 Heavy Vehicle 19m Truck and Dog Combinations

			Notice Weight
16		3 Axle Rigid and 3 Axle Dog Trailer	45.00 NSW = 48.00
22		4 Axle Twin Steer Rigid Truck and 3 Axle Dog Trailer	50.00
73		4 Axle Twin Steer Rigid Truck and 4 Axle Dog Trailer	50.00
76		3 Axle Rigid Truck and 4 Axle Dog Trailer	50.00

Figure 34: National Class 3 Truck and Dog Trailer Mass Exemption Notice 2020 (No.1)



These combinations have a 42.5 tonne GML and the notice (see Figure 34) allows heavier mass for trucks that comply with the requirements of it (e.g. axle spacing) and pay higher registration fees.

It is not reasonably practicable for bulk handlers to check axle spacings or registration payments, so the truck driver must ensure they meet all the requirements of the notice.

3.12 National Class 3 20m Long 3-axle Truck and 4-axle Dog Trailer Mass and Dimension Exemption Notice

The National Class 2 PBS Level 1 & 2A Truck and Dog Trailer Authorisation Notice 2021 (No.1) allows 3 Axle Trucks with 4 Axle Dog Trailers (Code 76) to operate to 57.50 tonnes on the PBS 2A road network when they have a PBS Vehicle Approval.

To simplify access for these trucks, the National Class 3 20m Long 3-axle Truck and 4-axle Dog Trailer Mass and Dimension Exemption Notice 2022 (No.2) (see Figure 35) allows the full 57.50 tonne PBS weight without a NHVR PBS Vehicle Approval.

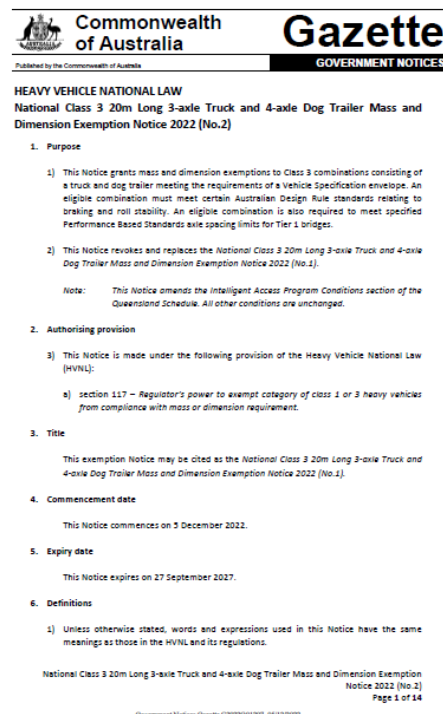


3 Axle Rigid Truck and 4 Axle Dog Trailer

Key points with the Notice:

- 57.50 tonnes is only permitted on the PBS 2A network, otherwise a NHVR PBS access permit is required.
- Councils may specify restrictions for the notice and detail about this is published on the NHVR website.
- GTSN members do not measure axle spacings to calculate lower mass limits because it is extremely complex and a safety risk. Truck operators with lower mass limits due to axle spacings must declare this to GTSN members when loading under this notice.

Figure 35: National Class 3 20m Long 3-axle Truck and 4-axle Dog Trailer Mass and Dimension Exemption Notice



3.13 South Australian 23 metre truck and dog notice

The purpose of the South Australia Class 3 Heavy Vehicle 23m Truck and Dog Trailer Mass and Dimension Exemption Notice 2017 Amendment Notice 2018 (No.1) is to exempt 23m truck and dog trailer combinations operating in South Australia from stated mass and dimension limits – see Figure 36.

A 23m truck and dog combination consists of a 3 axle truck towing a dog trailer with 3, 4 or 5 axles.

Figure 36: South Australia Class 3 Heavy Vehicle 23m Truck and Dog Trailer Mass and Dimension Exemption Notice 2017 Amendment Notice 2018 (No.1)

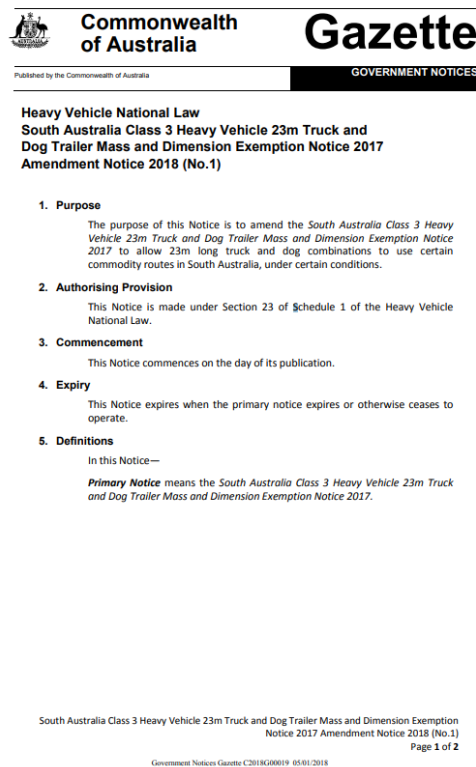






Figure 37: Truck Codes that can operate under the SA 23m Truck and Dog Trailer Notice

			Mass Limit
16		3 Axle Rigid Truck and 3 Axle Dog Trailer	48.00
76		3 Axle Rigid Truck and 4 Axle Dog Trailer	55.50
87		3 Axle Rigid Truck and 5 Axle Dog Trailer (PBS)	59.00

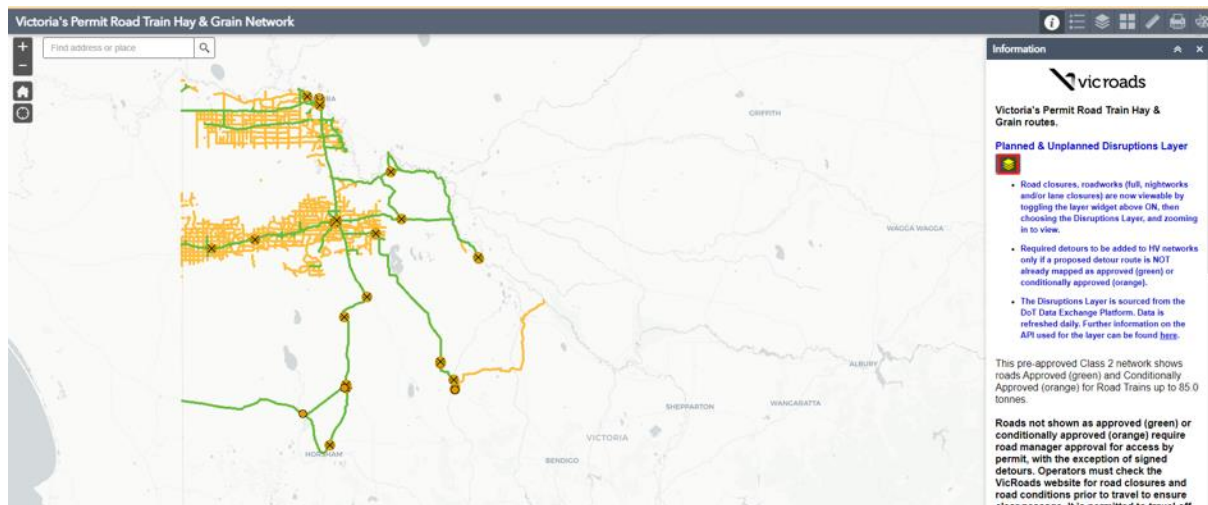
3.14 Victoria Road Train Hay & Grain Network

Road Trains and AB-triples operating in North-Western Victoria can operate at 36.5 metre length on the Victoria Hay and Grain Road network (see Figure 38).

28		Common 11 Axle Road Train
91		Common 12 Axle Road Train
88		Common 14 Axle AB-triple Road Train and 2 Axle Dolly
96		15 Axle AB-triple Road Train and 3 Axle Dolly

A NHVR access permit is required to access the pre-approved network, and specific roads listing grain sites are required when last mile issues exist off the pre-approved network. See Figure 8: Example NHVR access permit on roads that are not gazetted.

Figure 38: Victoria Hay & Grain Network for Road Trains and AB-triples



3.15 Road friendly suspension (RFS)

3.15.1 Victorian road friendly suspension

In Victoria, trucks fitted with road friendly suspension (RFS) can operate under the Victoria Class 3 Road Friendly Suspension Mass Exemption Notice 2019 (No.1) – see Figure 39. The notice allows trucks fitted with RFS to operate to CML without having to have NHVAS mass management accreditation.

A Victorian road friendly suspension column is included on the GTSN Truck Chart and for each truck code in this Truck Book, with the allowable mass limits where applicable.

3.15.2 Twin steer truck road friendly suspension

Since 1985 in Australia, all twin steer trucks have Load Sharing Suspension, which is designed to equally distribute the weight across the front axles of twin steer trucks – see Figure 40 for an example twin steer truck.

Given trucks without Load Sharing Suspension are very rare, all mass limits in this Truck Book include the Load Sharing Suspension concession where applicable. Trucks that do not have load sharing suspension must deduct one tonne from all mass limits in this Truck Book.

Note: Twin steer trucks are relatively uncommon in bulk grain.

Figure 39: Victoria Class 3 Road Friendly Suspension Mass Exemption Notice 2019 (No.1)

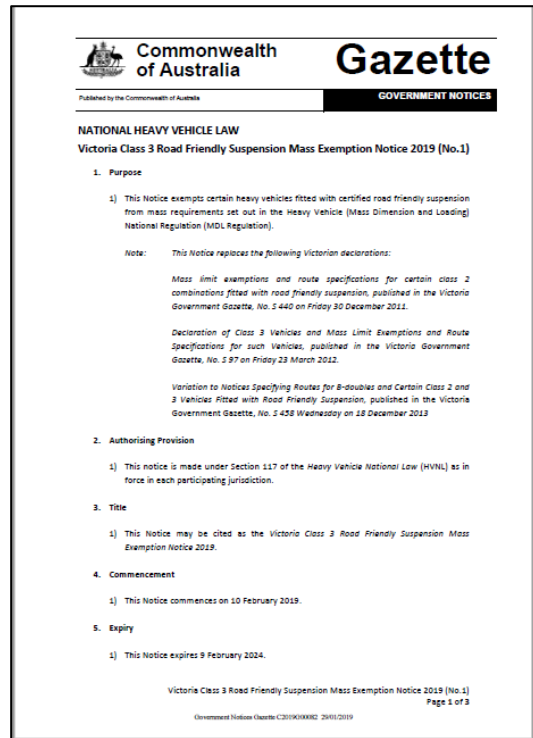


Figure 40: Example twin steer truck (Code 73 – 4 Axle Twin Steer Rigid Truck & 4 Axle Dog Trailer)



3.16 Grain harvest management scheme (GHMS)

Trucks that load in paddocks during harvest often do not have facilities to accurately weigh trucks. Consequently, there is a large variance between the gross weight and the mass limit when trucks are unloaded at bulk handlers. This variance can lead to significant underloading and increased truck movements.

Currently, Qld, NSW, Vic and SA all administer a grain harvest management scheme, each with different truck combinations and mass limits. Generally, the objective of these schemes is to minimise underloading by allowing a higher harvest mass limit for ex-farm deliveries, and for the average gross weight to be at the General mass limits (GML).

Work is currently underway to harmonise harvest mass management schemes.

In every state, to participate in the GHMS, bulk handlers sign an undertaking with the transport regulator to ensure data pertaining to all harvest deliveries is reported. Regulators can use this data to identify adverse trends in potentially overloaded trucks to ask further questions of bulk handlers, truck companies and growers.

Additionally, bulk handler policies further contribute to dis-incentivise overloading. Examples include warning notices given to truck drivers when they overload, emails, letters and phone calls to growers about overloads and, in some instances, banning specific truck companies from delivery.

3.16.1 Queensland GHMS

The Queensland Class 3 Heavy Vehicle (Grain Harvest Management Scheme) Mass Exemption Notice 2019 (No. 1) allows up to GML + 7.5% for deliveries from paddock to the designated bulk handler location – see Figure 41.

Key points with the Queensland harvest management scheme:

- The GHMS concession applies to most truck codes (PBS trucks are excluded)
- Trucks must display **the current** sticker - the sticker colour changes every year – see Figure 42 for an example. The first 2 digits of the permit number indicate the year of validity
- AgForce publish information on their website about how the GHMS works that can be helpful to freight providers
- Rejection limits no longer apply - TMR must be advised immediately when truck gross weights exceed specified limits
- Qld GHMS weights are maximum weights and 0.5t steer and 1.1 allowances do not apply when conditions are met
- PBS trucks do not qualify for GHMS
- The scheme expires on 30 June 2024.

For more information about truck and combination mass limits, refer to individual pages for each truck code, or the GTSN Truck Chart.

Figure 41: Queensland Class 3 Heavy Vehicle (GHMS) Mass Exemption Notice 2019 (No. 1)

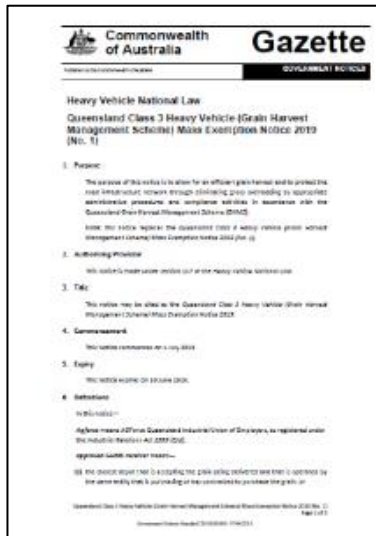


Figure 42: AgForce Qld GHMS stickers



3.16.2 New South Wales GHMS

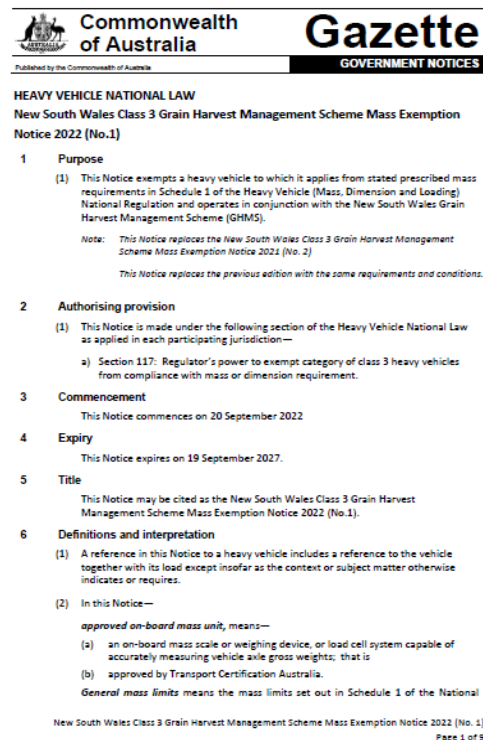
The New South Wales Class 3 Grain Harvest Management Scheme Mass Exemption Notice 2022 (No. 1) – see Figure 43, can be complex and care must be taken with the mass limits.

Mass limits under the GHMS allow GML + 5%, or CML without NHVAS mass management accreditation, for 19 truck configurations. Although a large number of configurations do not qualify for the scheme, by road volumes, most of the trucks that operate in NSW are represented.

Key points with the NSW Harvest Management Scheme:

- Trucks must have a copy of the notice – electronic copies are OK
- Council participation is optional, and GHMS mass limits cannot be used until councils participate – all councils historically participate in grain growing areas
- Trailers with ‘Super Single’ tyres on trailers are not able to participate
- 12 Axle Semitrailers (code 12) and 9 Axle B-doubles (code 68) get 0.2 and 0.8 tonnes respectively when they have NHVAS mass management accreditation

Figure 43: New South Wales Class 3 Grain Harvest Management Scheme Mass Exemption Notice 2022 (No. 1)



For more information about truck mass limits, refer to individual pages for each truck code, or the GTSN Truck Chart.

3.16.3 Victorian GHMS

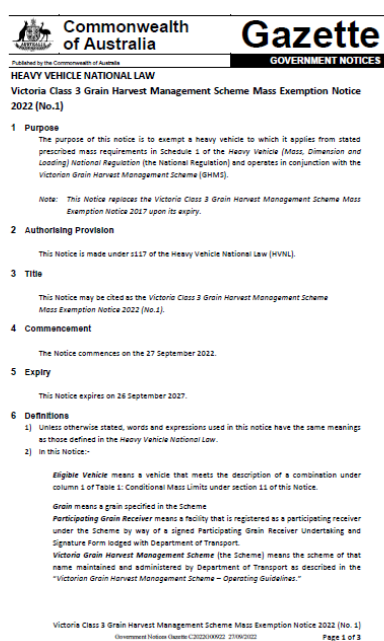
The Victoria Class 3 Grain Harvest Management Scheme Mass Exemption Notice 2022 (No.1) – see Figure 44, can be complex and care must be taken with the mass limits.

Mass limits under the GHMS allow GML + 5% for some truck configurations. Although many configurations do not qualify for the scheme, by road volumes, most of the trucks that operate in Victoria are represented.

Key points with the Victoria Harvest Management Scheme:

- Trucks must have a copy of the notice – electronic copies are OK
- If the truck meets the conditions of the scheme, including that it is newer than 2002 and compliant with ADR80, they can automatically participate – stickers are no longer issued to trucks. It is not reasonably practicable for GTSN members to determine if trucks can participate and truck drivers must declare if they can participate at delivery during harvest.

Figure 44: Victoria Class 3 Grain Harvest Management Scheme Mass Exemption Notice 2022 (No.1)



3.16.4 South Australian GHMS

The Heavy Vehicle National Law – South Australian Heavy Vehicle Farm Gate Grain Transport Mass Exemption Notice 2020 (No.1) applies – see Figure 45.

The notice provides for the loaded mass of a heavy vehicle to exceed the normal mass limit applicable of the vehicle / combination up to 105% for the first and second load carried by the heavy vehicle from a given paddock on a given day.

The exemption only applies in South Australia and is applicable to heavy vehicles transporting grain from the farm gate to a grain receiver when operating at:

- General mass limits; or
- Concessional mass limits; or
- Higher mass limits under the South Australia Class 3 (Application of Higher Mass Limits) Mass Exemption Notice 2020; or
- The mass limits specified in a primary notice
- The scheme expires on 2 February 2025.

Note: PBS trucks including AB-triples and any combination with a pig trailer are not eligible to participate in the SA GHMS.












Figure 45: South Australian Heavy Vehicle Farm Gate Grain Transport Mass Exemption Notice 2020 (No.1)



Detailed Truck Codes

4 Detailed truck codes (by truck type)

The following sections 4.1 to 4.11 detail all the currently known truck configurations and combinations used in the grain industry and their legal mass limits.

4.1	Rigid Trucks	Page 52	 <p>3 Axle Rigid Truck</p>
4.2	Truck & Dogs	Page 59	 <p>3 Axle Rigid Truck and 4 Axle Dog Trailer</p>
4.3	Truck and Pig Trailers	Page 77	 <p>3 Axle Rigid Truck and 2 Axle Pig Trailer</p>
4.4	Semitrailers	Page 87	 <p>Common 6 Axle Semitrailer</p>
4.5	B-doubles	Page 99	 <p>Common 9 Axle B-double</p>
4.6	AB-triples	Page 107	 <p>Common 14 Axle AB-triple Road train and 2 Axle Dolly</p>
4.7	Type 1 Road Trains	Page 118	 <p>Common 11 Axle Road Train</p>
4.8	B-triples	Page 133	 <p>Common 12 Axle B-triple Road Train</p>
4.9	Type 1 Road Trains with Dog Trailers	Page 138	 <p>3 Axle Rigid Truck and 2 x 4 Axle Dog Trailers (Road Train)</p>
4.10	Type 2 Road Trains	Page 156	 <p>Common 18 Axle 3 Axle Dolly Road Train (Type 2)</p>
4.11	Type 2 Quads	Page 162	 <p>18 Axle ABB-quad Road Train and 3 Axle Dolly</p>

4.1 Rigid Trucks

1



2 Axle Rigid Truck

9



3 Axle Rigid Truck

17



3 Axle Twin Steer Rigid Truck

18



4 Axle Twin Steer Rigid Truck

36



5 Axle Twin Steer Rigid Truck

43



4 Axle Tri Drive Rigid Truck

The maximum length of rigid trucks is 12.5 metres.

Rigid Trucks:

1

2 Axle Rigid Truck



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	15.00 1G	-	-	-	-	✓ 1GE	-		-		16.10
NSW		-									-
Vic		16.00 1RFS									16.80 1GHMS 1GHMSE
SA		-									15.75

Maximum length is 12.5 metres.

Rigid Trucks:

9

3 Axle Rigid Truck



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	22.50 9G	-	23.00 9C	23.00 9H	-	✓ 9GE 9CE 9HE	-				24.18
NSW											23.00
Vic		23.00 9RFS									23.60 9GHMS 9GHMSE
SA		-									GML 23.63 CML 24.15 HML 24.15

Maximum length is 12.5 metres.

Rigid Trucks:

3 Axle Twin Steer Rigid Truck

17



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	20.00 ¹ 17G 17GLS	-									21.40
NSW											-
Vic		21.00 17RFS	-	-	-	-	-	-	-		
SA		-									21.00

Maximum length is 12.5 metres.

¹ Trucks that do not have load sharing suspension must subtract one (1) tonne from the mass limit – refer [Twin Steer Truck Road Friendly Suspension](#) section.

Rigid Trucks:

Common 4 Axle Twin Steer Rigid Truck

18



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	27.50 ² 18G 18GLS	-	28.50	28.50	-	-	-				29.60
NSW			28.00	-							28.00 ³
Vic		28.00 18RFS	18C	28.90 18GHMS							
SA		-	18C	28.00 18H							GML 28.88 HML 29.40

Maximum length is 12.5 metres.

² Trucks that do not have load sharing suspension must subtract one (1) tonne from the mass limit – refer [Twin Steer Truck Road Friendly Suspension](#) section.

³ Trucks that do not have load sharing suspension must subtract one (1) tonne from the mass limit – refer [Twin Steer Truck Road Friendly Suspension](#) section.

Rigid Trucks:

5 Axle Twin Steer Rigid Truck

36


State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS					
Qld	31.00 ⁴ 36G 36GLS	-	32.00	-	-	-	-		- ⁵		33.20					
NSW			31.00 36C								-	-	-	-	-	-
Vic			32.00 36C 36CLS									-	-	-	-	-
SA			-								-	-	-	-	-	32.55

Maximum length is 12.5 metres.

⁴ Trucks that do not have load sharing suspension must subtract one (1) tonne from the mass limit – refer [Twin Steer Truck Road Friendly Suspension](#) section.

⁵ One of the rear axles is lazy and often raises when the truck is not loaded – tri drive trucks are PBS and none currently operate in grain.

Rigid Trucks:

4 Axle Tri Drive Rigid Truck

43



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS				
Qld	26.00 43G	-	27.00 43C	-	-	✓ 43GE 43CE	-				27.80				
NSW															
Vic		26.00 43RFS	-												
SA		-													27.30

Maximum length is 12.5 metres.

4.2 Truck & Dogs

7		2 Axle Rigid Truck and 2 Axle Dog Trailer
8		2 Axle Rigid Truck and 3 Axle Dog Trailer
15		3 Axle Rigid Truck and 2 Axle Dog Trailer
16		3 Axle Rigid Truck and 3 Axle Dog Trailer
21		4 Axle Twin Steer Rigid Truck and 2 Axle Dog Trailer
22		4 Axle Twin Steer Rigid Truck and 3 Axle Dog Trailer
32		4 Axle Tri Drive Rigid and 5 Axle Dog Trailer
44		3 Axle Rigid and 6 Axle Dog Trailer
55		4 Axle Twin Steer Rigid Truck and 5 Axle Dog Trailer (PBS)
56		4 Axle Rigid and 6 Axle Dog Trailer (PBS)

73



4 Axle Rigid Truck and 4 Axle Dog

76



3 Axle Rigid Truck and 4 Axle Dog Trailer

87



3 Axle Rigid Truck and 5 Axle Dog Trailer (PBS)

102



3 Axle Rigid Truck and 6 Axle Dog Trailer (PBS)

106



Twin steer 5 Axle Rigid and 3 Axle Dog (PBS)

107



4 Axle Tri Drive Rigid Truck and 4 Axle Dog (PBS)

Truck and Dogs:

2 Axle Rigid Truck and 2 Axle Dog Trailer

7



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	30.00 ⁶ 7G	-	-	-	-	✓ 7GE	-	-	-	-	32.25
NSW		-	-	-	-		-	-	-	-	-
Vic		30.50 7RFS	-	-	-		-	-	-	-	-
SA		-	-	-	-		-	-	-	-	-

⁶ Single tyres on dog trailer maximum weight of 27.0 tonnes.

Truck and Dogs:

2 Axle Rigid Truck and 3 Axle Dog Trailer

8



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	30.00 ⁷										35.25
NSW	33.75 8G	-	-	-	-	✓ 8GE	-		-		-
Vic	41.00 8G										
SA	33.75 8G										35.44

⁷ HV(MDL)NR Schedule 1 Part 1 Imposition of general mass limits 2(4) The mass of a dog/pig trailer shall not exceed the mass of the motor truck towing it any time.

Truck and Dogs:

3 Axle Rigid Truck and 2 Axle Dog Trailer

15



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	40.50 15G	-	41.00 15C	-	-	✓ 15GE 15CE	-				43.50
NSW											41.00
Vic											42.50 15GHMS 15GHMSE
SA											GML 42.53 CML 43.05

Truck and Dogs:

3 Axle Rigid Truck and 3 Axle Dog Trailer

16



State	GML	RFS	CML	HML	Notice ⁸	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML ⁹	PBS – HML	GHMS
Qld			43.50		45.00 16N19						45.70
NSW					48.00 16N 16N19	✓					44.63
Vic	42.50 16G	-	-	-	45.00 16N19	16GE 16NE 16N19E 16N23E	-	48.50 16GPBS	49.50 16CPBS	49.50 16HPBS	-
SA					45.00 16N19 48.00 ¹⁰ 16N23						44.63

⁸ Mass limits apply for trucks that comply with *National Class 3 Truck and Dog Trailer Mass Exemption Notice 2020 (No.1)* – GHMS concessions do not apply to permit mass limit. Most trucks are engineered to load to the maximum.

⁹ To operate as a PBS truck, it must have a Vehicle Approval and comply with the requirements of the *National Class 2 PBS Level 1 & 2A Truck and Dog Trailer Authorisation Notice 2021 (No.1)*. PBS access is limited to the PBS 2A network – PBS 2A HML access is limited to the PBS 2A HML network only.

¹⁰ *South Australia Class 3 23m Truck and Dog Trailer Mass and Dimension Exemption Notice 2020 (No.1)*.

Truck and Dogs:

4 Axle Twin Steer Rigid Truck and 2 Axle Dog Trailer

21



State	GML ¹¹	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	42.50 21G 21GLS	-	43.50 21C 21CLS	-	-	-	-				45.70
NSW											-
Vic											-
SA											GML 44.63 CML 45.68

¹¹ Trucks that do not have load sharing suspension must subtract one (1) tonne from the mass limit – refer [Twin Steer Truck Road Friendly Suspension](#) section.

Truck and Dogs:

4 Axle Twin Steer Rigid Truck and 3 Axle Dog Trailer

22



State	GML ¹²	RFS	CML	HML	Notice ¹³	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML ¹⁴	PBS – HML	GHMS
Qld					45.00						45.70
NSW	42.50 22G 22GLS	-	43.50 22C 22CLS	-	50.00 22N	-	-	50.00 ¹⁵ 22GPBS	54.00 22CPBS	54.00 22HPBS	44.63
Vic					45.00 22N						-
SA					53.00 22P						GML 44.63 CML 45.68 HML 47.25

¹² Trucks that do not have load sharing suspension must subtract one (1) tonne from the mass limit – refer [Twin Steer Truck Road Friendly Suspension](#) section.

¹³ Mass limits apply for trucks that comply with *National Class 3 Truck and Dog Trailer Mass Exemption Notice 2020 (No.1)* – GHMS concessions do not apply to permit mass limit. Most trucks are engineered to load to the maximum.

¹⁴ To operate as a PBS truck, it must have a Vehicle Approval and comply with the requirements of the *National Class 2 PBS Level 1 & 2A Truck and Dog Trailer Authorisation Notice 2021 (No.1)*. PBS access is limited to the PBS 2A network – PBS 2A HML access is limited to the PBS 2A HML network only.

¹⁵ 50.00 tonne mass limit applies for PBS Level 1 on PBS 2A network and 53.00 tonne mass limit applies on PBS 2B network.

Truck and Dogs:

4 Axle Tri Drive Rigid Truck and 5 Axle Dog (PBS)

32



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML ¹⁶	PBS – HML	GHMS
Qld											
NSW											
Vic	-	-	-	-	-	-	-	63.00 32GPBS	65.00 32CPBS	68.50 32HPBS	-
SA											

¹⁶ To operate as a PBS truck, it must have a Vehicle Approval and comply with the requirements of the *National Class 2 PBS Level 1 & 2A Truck and Dog Trailer Authorisation Notice 2021 (No.1)*. PBS access is limited to the PBS 2A network – PBS 2A HML access is limited to the PBS 2A HML network only.

Truck and Dogs:

3 Axle Rigid Truck and 6 Axle Dog Trailer (PBS)¹⁷

44



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld ¹⁸	-	-	-	-	-	-	-	63.00 44GPBS	65.00 44CPBS	68.50 44HPBS	-
NSW ¹⁹											
Vic											
SA											

¹⁷ To operate as a PBS truck, it must have a Vehicle Approval and have a NHVR Access Permit specifying the network and road access

¹⁸ Check permit for access on B double roads or other roads.

¹⁹ Check permit for access on the PBS 2A network.

Truck and Dogs: 4 Axle Twin Steer Rigid Truck and 5 Axle Dog Trailer (PBS)

55



State	GML ²⁰	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML ²¹	PBS – HML	GHMS
Qld											
NSW											
Vic	-	-	-	-	-	-	-	64.00 55GPBS	66.00 55CPBS	67.50 55HPBS	-
SA											

Can operate under PBS truck and dog notice.

²⁰ Trucks that do not have load sharing suspension must subtract one (1) tonne from the mass limit – refer [Twin Steer Truck Road Friendly Suspension](#) section.

²¹ PBS Level 2 access is granted on B-double routes in NSW and Victoria – HML is permitted on HML routes only with IAP.

Truck and Dogs: 4 Axle Twin Steer Rigid Truck and 6 Axle Dog Trailer (PBS)²²
56


State	GML ²³	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML ²⁴	PBS – HML	GHMS
Qld								67.50 56GPBS	70.00 56CPBS	73.00 56HPBS	
NSW	-	-	-	-	-	-	-				-
Vic								-	-	-	
SA								67.50 56GPBS	70.00 56CPBS	73.00 56HPBS	

²² To operate as a PBS truck, it must have a Vehicle Approval and have a NHVR Access Permit specifying the network and road access - cannot operate under PBS truck and dog notice.

²³ Trucks that do not have load sharing suspension must subtract one (1) tonne from the mass limit – refer [Twin Steer Truck Road Friendly Suspension](#) section.

²⁴ Maximum PBS weights are restricted to specific roads and care should be taken to check permit. On B-double roads in NSW and Qld PBC = 66.40 tonnes and PBH = 69.90 tonnes.

Truck and Dogs:

4 Axle Twin Steer Rigid Truck and 4 Axle Dog Trailer²⁵

73



State	GML ²⁶	RFS	CML	HML	Notice ²⁷	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld								-			45.70
NSW	42.50	-	43.50	-	50.00	-	-	-	-	-	-
Vic	73G 73GLS		73C 73CLS		73N			62.00 73GPBS			
SA								-			GML 44.63 CML 45.68

²⁵ To operate as a PBS truck, it must have a Vehicle Approval and have a NHVR Access Permit specifying the network and road access - cannot operate under PBS truck and dog notice.
²⁶ Trucks that do not have load sharing suspension must subtract one (1) tonne from the mass limit – refer [Twin Steer Truck Road Friendly Suspension](#) section.
²⁷ Mass limits apply for trucks that comply with *National Class 3 Truck and Dog Trailer Mass Exemption Notice 2020 (No.1)* – GHMS concessions do not apply to permit mass limit. Most trucks are engineered to load to the maximum.

Truck and Dogs:

Common 3 Axle Rigid Truck and 4 Axle Dog Trailer

76



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML ²⁸	PBS – HML	GHMS
Qld					50.00 ²⁹ 76N19 76N20	✓					45.70
NSW	42.50 76G	-	43.50 76C	-	55.50 ³⁰ 76N23 57.00 76P	76GE 76CE 76N19E 76N20E 76N20RE 76N23E	-	56.00 76GPBS	57.50 76CPBS	57.50 76HPBS	44.63
Vic					76N20R 57.50 ³¹						-
SA											GML 44.63 CML 45.68

²⁸ To operate as a PBS truck, it must have a Vehicle Approval and comply with the requirements of the *National Class 2 PBS Level 1 & 2A Truck and Dog Trailer Authorisation Notice 2021 (No.1)*. PBS access is limited to the PBS 2A network – PBS 2A HML access is limited to the PBS 2A HML network only.

²⁹ Mass limits apply for trucks that comply with the *National Class 3 Truck and Dog Trailer Mass Exemption Notice 2020 (No.1)* – GHMS concessions do not apply to permit mass limit. It is not reasonably practicable to check lower mass limits due to shorter axle spacings.

³⁰ *South Australia Class 3 23m Truck and Dog Trailer Mass and Dimension Exemption Notice 2020 (No.1)*.

³¹ Mass Limits apply for trucks that comply with the *National Class 3 20m Long 3-axle Truck and 4-axle Dog Trailer Mass and Dimension Exemption Notice (No. 1) on the PBS 2A Network only*. It is not reasonably practicable to check lower mass limits due to shorter axle spacings.

Truck and Dogs:

3 Axle Rigid Truck and 5 Axle Dog Trailer (PBS)

87



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML ³²	PBS – HML	GHMS
Qld											
NSW	-	-	-	-	-	-	-	59.50 87GPBS	61.50 87CPBS	63.00 87HPBS	-
Vic											
SA					59.00 ³³ 87N23	✓ 87N23E					

³² To operate as a PBS truck, it must have a Vehicle Approval and comply with the requirements of the *National Class 2 PBS Level 1 & 2A Truck and Dog Trailer Authorisation Notice 2021 (No.1)*. PBS access is limited to the PBS 2A network – PBS 2A HML access is limited to the PBS 2A HML network only.

³³ *South Australia Class 3 23m Truck and Dog Trailer Mass and Dimension Exemption Notice 2020 (No.1)*

Truck and Dogs:

3 Axle Rigid and 2 Axle Dolly and 4 Axle Trailer (PBS)

102



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	-	-	-	-	-	-	-	-			-
NSW											
Vic ³⁴								59.50 102GPBS	61.50 102CPBS	67.50 102HPBS	
SA								-			

³⁴ Truck has maximum 63.0 tonne mass limit on the PBS 2A network only with vehicle approval and access permit

Truck and Dogs:

Twin steer 5 Axle Rigid and 3 Axle Dog (PBS)

106



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	-							-	-	-	
NSW	50.00 ³⁵							56.60 ³⁶	58.00 ³⁷	59.50 ³⁸	
Vic		-	-	-	-	-	-				-
SA	-							-	-	-	

³⁵ The vehicle is permitted to operate at General Mass Limits (GML) 50.0 tonnes Gross Combination Mass on all state controlled roads approved under ‘PBS Level 1 GML and CML Network’ in New South Wales.

³⁶ The vehicle is permitted to operate at General Mass Limits (GML) 56.5 tonnes Gross Combination Mass on all state controlled roads approved under ‘PBS Level 2A GML and CML Network’ in New South Wales.

³⁷ The vehicle is permitted to operate at Concessional Mass Limits (CML) 58.0 tonnes Gross Combination Mass on all state controlled roads approved under ‘PBS Level 2A GML and CML Network’ in New South Wales.

³⁸ The vehicle is permitted to operate at Higher Mass Limits (HML) 59.5 tonnes Gross Combination Mass on all state controlled roads approved under ‘PBS Level 2A HML Network’ in New South Wales.

Truck and Dogs:

4 Axle Tri Drive Rigid Truck and 4 Axle Dog (PBS)

107



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML ³⁹	PBS – CML	PBS – HML	GHMS
Qld	-	-	-	-	50.50	✓	-	59.50	61.50	63.00	-
NSW											
Vic											
SA											

³⁹ To operate as a PBS truck, it must have a Vehicle Approval and comply with the requirements of the *National Class 2 PBS Level 1 & 2A Truck and Dog Trailer Authorisation Notice 2021 (No.1)*. PBS access is limited to the PBS 2A network – PBS 2A HML access is limited to the PBS 2A HML network only.

4.3 Truck and Pig Trailers

5



2 Axle Rigid Truck and 2 Axle Pig Trailer

6



2 Axle Rigid Truck and 3 Axle Pig Trailer

13



3 Axle Rigid Truck and 2 Axle Pig Trailer

14



3 Axle Rigid Truck and 3 Axle Pig Trailer

19



4 Axle Twin Steer Rigid Truck and 2 Axle Pig Trailer

20



4 Axle Twin Steer Rigid Truck and 3 Axle Pig Trailer

35



4 Axle Twin Steer Rigid Truck and 1 Axle Pig Trailer

84



3 Axle Rigid Truck and 1 Axle Pig Trailer

86



2 Axle Rigid Truck and 1 Axle Pig Trailer

Truck and Pig Trailers:

2 Axle Rigid Truck and 2 Axle Pig Trailer

5



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	30.00 5G	-	-	-	-	✓ 5GE	-				32.20
NSW											-
Vic											-
SA											-

Truck and Pig Trailers:

2 Axle Rigid Truck and 3 Axle Pig Trailer

6



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	30.00 6G	-	-	-	-	✓ 6GE	-				32.20
NSW											-
Vic											-
SA											-

Truck and Pig Trailers:

3 Axle Rigid Truck and 2 Axle Pig Trailer

13



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	37.50 ⁴⁰ 13G	-	-	-	-	✓ 13GE	-				40.30
NSW											-
Vic											-
SA											-

⁴⁰ Single tyres on pig trailer maximum weight of 31.0mt.

Truck and Pig Trailers:

3 Axle Rigid Truck and 3 Axle Pig Trailer

14



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	40.50 14G	-	-	-	-	✓ 14GE	-				43.50
NSW											-
Vic											-
SA											-

Truck and Pig Trailers:

4 Axle Twin Steer Rigid Truck and 2 Axle Pig Trailer

19



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	42.50 ⁴¹ 19G 19GLS	-	-	-	-	-	-				45.70
NSW											-
Vic											-
SA											-

⁴¹ Trucks that do not have load sharing suspension must subtract one (1) tonne from the mass limit – refer [Twin Steer Truck Road Friendly Suspension](#) section.

Truck and Pig Trailers:

4 Axle Twin Steer Rigid Truck and 3 Axle Pig Trailer

20



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	42.50 ⁴² 20G 20GLS	-	-	-	-	-	-				45.70
NSW											-
Vic											-
SA											-

⁴² Trucks that do not have load sharing suspension must subtract one (1) tonne from the mass limit – refer [Twin Steer Truck Road Friendly Suspension](#) section.

Truck and Pig Trailers:

4 Axle Twin Steer Rigid Truck and 1 Axle Dog Trailer

35



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	36.00 ⁴³ 35G 35GLS	-	-	-	-	-	-				38.70
NSW											-
Vic											-
SA											-

⁴³ Trucks that do not have load sharing suspension must subtract one (1) tonne from the mass limit – refer [Twin Steer Truck Road Friendly Suspension](#) section.

Truck and Pig Trailers:

3 Axle Rigid Truck and 1 Axle Pig Trailer

84



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	31.00 84G	-	-	-	-	✓ 84GE	-				33.30
NSW											-
Vic											-
SA											-

- For further codes with GML/CML/HML Combinations & Restrictions, refer to page 180.

Truck and Pig Trailers:


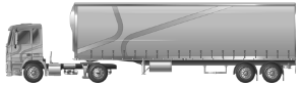









2 Axle Rigid Truck and 1 Axle Pig Trailer

86



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	23.50 86G	-	-	-	-	✓ 86GE	-				25.30
NSW											-
Vic											-
SA											-

4.4 Semitrailers

2		3 Axle Semitrailer
3		Common 4 Axle Semitrailer
4		5 Axle Semitrailer
10		4 Axle Semitrailer
11		Common 5 Axle Semitrailer
12		Common 6 Axle Semitrailer
33		4 Axle Prime Mover and 4 Axle Semitrailer (PBS)
34		3 Axle Prime Mover and 4 Axle Semitrailer (PBS)
45		7 Axle Twin Steer Semitrailer
57		4 Axle Twin Steer Prime Mover and 2 Axle Semitrailer (PBS)
110		3 Axle Prime Mover and 3 Axle (1 2) Group Trailer

Semitrailers:

3 Axle Semitrailer

2

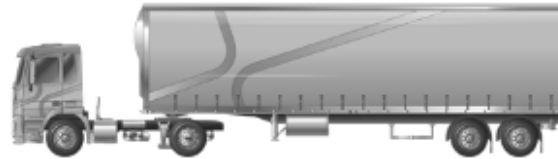


State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	24.00 2G	-	-	-	-	✓ 2GE	-				25.80
NSW		-	-	-	-		-				-
Vic		26.00 2RFS	-	-	-		-				27.30 2GHMS 2GHMSE
SA		-	-	-	-		25.20				

Semitrailers:

3

Common 4 Axle Semitrailer

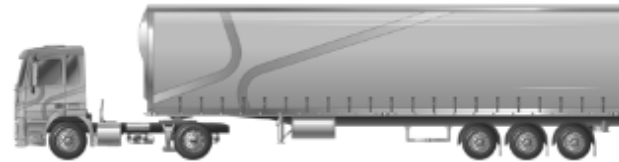


State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	31.50 3G	-	32.00 3C	-	-	✓ 3GE 3CE 3HE	-				33.90
NSW		-		-							32.00
Vic		32.50 3RFS		33.00 3H							34.10 3GHMS 3GHMSE
SA		-		32.00 3H							GML 33.08 CML 33.60 HML 33.60

Semitrailers:

5 Axle Semitrailer

4



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	35.00 4G	-	36.00 4C	37.50 4H	-	✓ 4GE 4CE 4HE	-				37.60
NSW			36.00 4RFS	37.00 4C							38.50 4H
Vic		-	36.00 4C	37.50 4H							37.80 4GHMS 4GHMSE
SA		-	36.00 4C	37.50 4H							GML 36.75 CML 37.80 HML 39.38

Semitrailers:

10

4 Axle Semitrailer



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS	
Qld	31.50 10G	-	32.00 10C	-	-	✓ 10GE 10CE	✓ ⁴⁴ 10GES 10CES				33.90	
NSW			-								-	-
Vic		33.00 10RFS	33.00 10C				-				-	-
SA		-	32.00 10C									✓ ⁴⁵ 10GES 10CES

⁴⁴ Applies on the B-double network or greater only

⁴⁵ Applies on the PBS 1A network or greater only

Semitrailers:

Common 5 Axle Semitrailer

11



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	39.00 11G	-	40.00 11C	11H	-	✓ 11GE 11CE 11HE	✓ ⁴⁶ 11GES 11CES 11HES				41.90
NSW											40.00
Vic		40.00 11RFS									
SA		-		40.00 11H			✓ ⁴⁷ 11GES 11CES 11HES				GML 40.95 CML 42.00 HML 42.00

⁴⁶ Applies on the B-double network or greater only

⁴⁷ Applies on the PBS 1A network or greater only

Semitrailers:

Common 6 Axle Semitrailer

12



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	42.50 12G	-	43.50 12C	45.50 12H	-	✓ 12GE 12CE 12HE	✓ ⁴⁸ 12GES 12CES 12HES				45.70
NSW		-									44.63 ⁴⁹
Vic		43.00 12RFS									44.60 12GHMS 12GHMSE
SA		-									GML 44.63 CML 45.68 HML 47.78

- For further codes with GML/CML/HML Combinations & Restrictions, refer to page 180.

⁴⁸ Applies on the B-double network or greater only

⁴⁹ Trucks with NHVAS Mass get an additional 0.2 tonnes.

⁵⁰ Applies on the PBS 1A network or greater only

Semitrailers:

4 Axle Prime Mover and 4 Axle Semitrailer (PBS)

33



State	GML ⁵¹	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	42.50 ⁵² 33G 3GLS	-	-	-	-	3HE	-	47.50 33GPBS	48.50 33CPBS	55.00 ⁵³ 33HPBS	-
NSW											
Vic											
SA											44.63

⁵¹ Trucks that do not have load sharing suspension must subtract one (1) tonne from the mass limit – refer [Twin Steer Truck Road Friendly Suspension](#) section.

⁵² A quad-axle semitrailer combination with a quad-axle group mass that does not exceed 20 tonnes is eligible for General Access, provided it complies dimensionally with the Heavy Vehicle (Mass, Dimension and Loading) National Regulation – length 19 m, width 2.5 m, height 4.3 m and mass 42.5 tonnes. For more information see NHVR publication [PBS combinations fitted with quad-axle groups, June 2017](#).

⁵³ Lower mass limit (i.e. 50.0t) may apply depending on NHVR Access Permit.

Semitrailers:

3 Axle Prime Mover and 4 Axle Trailer (PBS)

34



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	42.50 ⁵⁴ 34G	-	-	-	-	✓ 34GE	✓ ⁵⁵ 34GES	43.00 34GPBS	44.00 ⁵⁶ 34CPBS	50.50 ⁵⁷ 34HPBS	-
NSW											
Vic											
SA							✓ ⁵⁸ 34GES			44.63	

⁵⁴ A quad-axle semitrailer combination with a quad-axle group mass that does not exceed 20 tonnes is eligible for General Access, provided it complies dimensionally with the Heavy Vehicle (Mass, Dimension and Loading) National Regulation – length 19 m, width 2.5 m, height 4.3 m and mass 42.5 tonnes. For more information see NHVR publication [PBS combinations fitted with quad-axle groups, June 2017](#).

⁵⁵ Applies on the B-double network or greater only

⁵⁶ Access granted examples with NHVR Access Permit on the NSW PBS 1A network.

⁵⁷ Access granted examples with NHVR Access Permit on the NSW PBS 1A HML network, or on specific roads. Lower mass limit of 46.0t may apply depending on NHVR Access Permit.

⁵⁸ Applies on the PBS 1A network or greater only

Semitrailers:

7 Axle Twin Steer Semitrailer

45



State	GML ⁵⁹	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS					
Qld	47.50	-	48.50	49.50 45H 45HLS	-	-	-		-		51.10					
NSW	46.50 45G 45GLS		47.50 45C 45CLS								-	-	-	-	-	-
Vic				-												
SA	-		-								-	-	-	-	48.83	

⁵⁹ To load to the maximum gross weight, care must be taken to not exceed the axle / axle group mass limits. GML for axle groups: Twin Steer 11.0t (load sharing suspension required); tandem drive 16.5t; tri-axle semitrailer 20.0t. For more information see NHVR Information Sheet [Mass limits for twin steer prime movers towing tri-axle semitrailers](#). Trucks that do not have load sharing suspension must subtract one (1) tonne from the mass limit – refer [Twin Steer Truck Road Friendly Suspension](#) section.

Semitrailers:

4 Axle Twin Steer Prime Mover with 2 Axle Semitrailer

57



State	GML ⁶⁰	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS							
Qld	42.50	-	43.50	-	-	-	-	-	-	-	45.70							
NSW	39.00 57G 57GLS		40.00								-	-	-	-	-	-	-	-
Vic			57C 57CLS															
SA			57C 57CLS															

⁶⁰ Subtract one tonne from the mass limit for non-load sharing combinations.

Semitrailers:

3 Axle Prime Mover and 3 Axle (1 2) Group Trailer⁶¹

110



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld								-	49.50	-	
NSW											
Vic	-	-	-	-	-	-	-				
SA											

⁶¹ Access is extremely limited, and truck must have a PBS Vehicle Approval and Access Permit

4.5 B-doubles

29



8 Axle B-double

58



Tri-Quad B-double (PBS)

68



Common 9 Axle B-double

83



Common 7 Axle B-double

85



Twin Steer 10 Axle B-double

92



8 Axle B-double

101



3 Axle Prime Mover and 3 Axle A Trailer and 4 Axle B Trailer

B-doubles:

8 Axle B-double

29



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	59.00 29G	59.50 29RFS	61.00 29C	62.50 29H	-	✓ 29GE 29CE 29HE	✓ ⁶²	-	-	-	63.40
NSW							✓ ⁶³ 29GES 29CES 29HES				-
Vic							✓ ⁶⁴ 29GES 29CES 29HES				-
SA							✓ ⁶⁵ 29GES 29CES 29HES				GML 61.95 CML 64.05 HML 65.63

⁶² Queensland 25/26 metre B-double Network

⁶³ New South Wales GML Type 1 A-double Network

⁶⁴ Victoria Road Train Network – note this is northern Victoria only and not the HPFV network

⁶⁵ South Australia 26m B-double (GML) Network

B-doubles:

Tri-Quad B-double (PBS)

58



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld								62.50	65.00 ⁶⁶	68.50 ⁶⁷	
NSW								63.00 58GPBS	65.00 ⁶⁸ 58CPBS	68.50 ⁶⁹ 58HPBS	
Vic	-	-	-	-	-	-	-				-
SA								-	-	-	

⁶⁶ QLM1 Access: Vehicle Permitted to operate on B-double Routes.

⁶⁷ QLM2 Access: Vehicle Permitted to operate on B-double HML Routes.

⁶⁸ QLM1 Access: Vehicle permitted to operate on all state controlled roads approved under the ‘PBS Level 2A GML and CML Network in NSW.

⁶⁹ QLM2 Access: Vehicle permitted to operate on all state controlled roads approved under the ‘PBS Level 2A GML and CML HML Network in NSW.

B-doubles:

Common 9 Axle B-double

68



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	62.50 68G	-	64.50 68C	68.00 68H	-	✓ 68GE 68CE 68HE	✓ ⁷⁰				67.10
NSW							68GES 68CES 68HES				65.63 ⁷²
Vic		63.00 68RFS					68GES 68CES 68HES				65.60 68GHMS 68GHMSE
SA		-					68GES 68CES 68HES				GML 65.63 CML 67.73 HML 71.40

- For further codes with GML/CML/HML Combinations & Restrictions, refer to page 180.

⁷⁰ Queensland 25/26 metre B-double Network

⁷¹ New South Wales GML Type 1 A-double Network

⁷² Trucks with NHVAS Mass get an additional 0.8 tonnes

⁷³ Victoria Road Train Network – note this is northern Victoria only and not the HPFV network

⁷⁴ South Australia 26m B-double (GML) Network

B-doubles:

Common 7 Axle B-double

83



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS ⁷⁵
Qld	55.50 83G	-	57.00 83C	83H	50.00 ⁷⁶ 83N	✓ 83GE 83CE 83HE	✓ ⁷⁷	-	-	-	59.70
NSW							✓ ⁷⁸ 83GES 83CES 83HES				57.00
Vic		57.00 83RFS					✓ ⁷⁹ 83GES 83CES 83HES				58.30 83GHMS 83GHMSE 83NGHMS 83NGHMSE
SA		-		✓ ⁸⁰ 83GES 83CES 83HES			GML 58.28 CML 59.85 HML 59.85				

⁷⁵ On routes with no B-double access, GHMS mass limits are as follows: Qld = 53.70t; NSW and Vic = 52.50t.

⁷⁶ On general access (non B-double) routes GML = 50.00t and CML = 51.00t.

⁷⁷ Queensland 25/26 metre B-double Network

⁷⁸ New South Wales GML Type 1 A-double Network

⁷⁹ Victoria Road Train Network – note this is northern Victoria only and not the HPFV network

⁸⁰ South Australia 26m B-double (GML) Network

B-doubles:

Twin Steer 10 Axle B-double

85



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld											67.20
NSW	62.50	-	64.50	68.00	-	-	-		-		-
Vic	85G 85GLS		85C 85CLS	85H 85HLS							
SA											GML 65.63 CML 67.73 HML 71.40

B-doubles:

8 Axle B-double⁸¹

92



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS	
Qld	59.00 92G	-	61.00 92C	62.50 92H	-	✓ 92GE 92CE 92HE	✓ ⁸²				63.40	
NSW							✓ ⁸³ 92GES 92CES 92HES					
Vic		59.50 92RFS					✓ ⁸⁴ 92GES 92CES 92HES					-
SA		-					✓ ⁸⁵ 92GES 92CES 92HES					GML 61.95 CML 64.05 HML 65.63

⁸¹ The first and second trailers are interchangeable.

⁸² Queensland 25/26 metre B-double Network

⁸³ New South Wales GML Type 1 A-double Network

⁸⁴ Victoria Road Train Network – note this is northern Victoria only and not the HPFV network

⁸⁵ South Australia 26m B-double (GML) Network

B-doubles:

3 Axle Prime Mover and 3 Axle A Trailer and 4 Axle B Trailer (PBS)⁸⁶

101



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld											
NSW											
Vic											
SA											

⁸⁶ No PBS access permits are known to exist with grain trucks. A quad axle group is excluded under the National B-double Notice: Conditions – Quad axle group restriction: An eligible vehicle operating under this Schedule may not have a quad axle group on any its components when operating on a State controlled road.

4.6 AB-triples

60		11 Axle AB-triple
64		12 Axle AB-triple Road Train and 3 Axle Dolly
66		13 Axle AB-triple Road Train and 3 Axle Dolly
70		13 Axle AB-triple Road Train and 2 Axle Dolly
71		13 Axle AB-triple Road Train and 3 Axle Dolly
88		Common 14 Axle AB-triple Road Train and 2 Axle Dolly
93		13 Axle AB-triple Road Train and 2 Axle Dolly
95		12 Axle AB-triple Road Train and 2 Axle Dolly
96		15 Axle AB-triple Road Train and 3 Axle Dolly
98		14 Axle AB-triple Road Train and 3 Axle Dolly

AB-triples:

11 Axle AB-triple

60



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS		
Qld	88.50	-	91.50	-	-	✓	✓				95.10		
NSW			90.50								-		
Vic	-		-			-	-				-	-	-
SA⁸⁷	88.50 60G		90.50 60C			✓ 60GE 60CE	✓ 60GES 60CES				GML 92.93 CML 95.03		

⁸⁷ NHVR Access Permit required to operate in South Australia.

AB-triples:

12 Axle AB-triple Road Train and 3 Axle Dolly

64



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS	
Qld	92.00	-	95.00 ⁸⁸	96.50	-	✓	✓				98.90	
NSW			94.00								-	
Vic⁸⁹	-		-	-		-	-				-	-
SA⁹⁰	92.00 64G		94.00 64C	96.50 64H		✓ 64GE 64CE 64HE	✓ 64GES 64CES 64HES				GML 96.60 CML 98.70 HML 101.33	

⁸⁸ CML AB-triples in Qld get another 1.0 tonne.

⁸⁹ NHVR Access Permit required to operate in Victoria.

⁹⁰ NHVR Access Permit required to operate in South Australia.

AB-triples:

13 Axle AB-triple Road Train and 3 Axle Dolly⁹¹

66



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS	
Qld	95.50	-	98.50 ⁹²	102.00	-	✓	✓				102.70	
NSW			97.50								-	
Vic ⁹³	-		-	-		-	-				-	-
SA ⁹⁴	95.50 66G		97.50 66C	102.00 66H		✓ 66GE 66CE 66HE	✓ 66GES 66CES 66HES				GML 100.28 CML 102.38 HML 107.10	

⁹¹ OK to swap the tandem/tri trailers to have the same mass limits.

⁹² CML AB-triples in Qld get another 1.0 tonne.

⁹³ NHVR Access Permit required to operate in Victoria.

⁹⁴ NHVR Access Permit required to operate in South Australia.

AB-triples:

13 Axle AB-triple Road Train and 2 Axle Dolly⁹⁵

70



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS	
Qld	95.50	-	98.50 ⁹⁶	102.00	-	✓	✓				102.70	
NSW			97.50								-	
Vic⁹⁷	-		-	-		-	-				-	-
SA⁹⁸	95.50 70G		97.50 70C	102.00 70H		✓ 70GE 70CE 70HE	✓ 70GES 70CES 70HES				GML 100.28 CML 102.38 HML 107.10	

⁹⁵ Permitted to swap the tandem/tri trailers to have the same mass limits.

⁹⁶ CML AB-triples in Qld get another 1.0 tonne.

⁹⁷ NHVR Access Permit required to operate in Victoria.

⁹⁸ NHVR Access Permit required to operate in South Australia.

AB-triples:

13 Axle AB-triple Road Train and 3 Axle Dolly

71



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	95.50		98.50 ⁹⁹	100.50		✓	✓				102.70
NSW			97.50	100.50 ¹⁰⁰							-
Vic	-	-	-	-	-	-	-	-	-	-	-
SA¹⁰¹	95.50 71G		97.50 71C	100.50 71H		✓ 71GE 71CE 71HE	✓ 71GES 71CES 71HES				GML 100.28 CML 102.38 HML 107.10

⁹⁹ CML AB-triples in Qld get another 1.0 tonne.

¹⁰⁰ HML is reduced under a Class 2 permit issued by the NHVR.

¹⁰¹ NHVR Access Permit required to operate in South Australia.

AB-triples:

Common 14 Axle AB-triple Road Train and 2 Axle Dolly

88



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer 102	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	99.00 88G	-	102.00 103	107.50 88H	-	✓ 88GE 88CE 88HE	✓ 88GES 88CES 88HES		-		106.40
NSW			104.00								
Vic ¹⁰⁴			101.00 88C								-
SA ¹⁰⁵			GML 103.95 CML 106.05 HML 112.88								

¹⁰² Currently restricted to max GMC of 108.00 tonnes in South Australia

¹⁰³ CML AB-triples in Qld get another 1.0 tonne because GML is heavier than 80 tonnes.

¹⁰⁴ NHVR Access Permit required to operate in Victoria

¹⁰⁵ NHVR Access Permit required to operate in South Australia.

AB-triples:

13 Axle AB-triple Road Train and 2 Axle Dolly¹⁰⁶

93



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS		
Qld	95.50	-	98.50 ₁₀₇	102.00	-	✓	✓				102.70		
NSW			97.50								-		
Vic	-		-	-		-	-				-	-	-
SA¹⁰⁸	95.50 93G		97.50 93C	102.00 93H		✓ 93GE 93CE 93HE	✓ 93GES 93CES 93HES				GML 100.28 CML 102.38 HML 107.10		

¹⁰⁶ All trailers are interchangeable - axles on the dolly cannot be changed

¹⁰⁷ CML AB-triples in Qld get another 1.0 tonne.

¹⁰⁸ NHVR Access Permit required to operate in South Australia.

AB-triples:

12 Axle AB-triple and 2 Axle Dolly¹⁰⁹

95



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS		
Qld	92.00	-	95.00 ¹¹⁰	96.50	-	✓	✓				98.90		
NSW			94.00								-		
Vic	-		-	-		-	-				-	-	-
SA¹¹¹	92.00 95G		94.00 95C	96.50 95H		✓ 95GE 95CE 95HE	✓ 95GES 95CES 95HES				GML 96.60 CML 98.70 HML 101.33		

¹⁰⁹ Permitted to swap the tandem/tri trailers to have the same mass limits.

¹¹⁰ CML AB-triples in Qld get another 1.0 tonne.

¹¹¹ NHVR Access Permit required to operate in South Australia.

AB-triples:

15 Axle AB-triple Road Train and 3 Axle Dolly

96



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS		
Qld	102.50	-	105.50 ¹¹²	113.00	-	✓	✓				110.10		
NSW			104.50								107.63		
Vic	96G		96C	96H		-	96GE 96CE 96HE				96GES 96CES 96HES	-	-
SA¹¹³	102.50 96G		104.50 96C	113.00 ¹¹⁴ 96H		✓ 96GE 96CE 96HE	✓ 96GES 96CES 96HES				GML 107.63 CML 109.73 HML 118.65		

- For further codes with GML/CML/HML Combinations & Restrictions, refer to page 180.

¹¹² CML AB-triples in Qld get another 1.0 tonne because GML is heavier than 80 tonnes.

¹¹³ NHVR Access Permit required to operate in South Australia.

¹¹⁴ GCM of prime mover restricted to max 110.00t.

AB-triples:

98

14 Axle AB-triple¹¹⁵







State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS		
Qld	99.00	-	102.00	107.50	-	✓	✓				106.40		
NSW			101.00								-		
Vic	-		-	-		-	-				-	-	-
SA¹¹⁶	99.00 98G		101.00 98C	107.50 98H		✓ 98GE 98CE 98HE	✓ 98GES 98CES 98HES				GML 103.95 CML 106.05 HML 112.88		

¹¹⁵ Permitted to swap the tandem/tri trailers to have the same mass limits.

¹¹⁶ NHVR Access Permit required to operate in South Australia.

4.7 Type 1 Road Trains

24		3 Axle Prime Mover and 2 Axle Trailer and 2 Axle Dog Trailer and 2 Axle Trailer
25		5 Axle Prime Mover and 2 Axle Dolly and 3 Axle Trailer (Road Train)
27		6 Axle Prime Mover and 2 Axle Dolly and 2 Axle Trailer
28		Common 11 Axle Road Train
31		11 Axle Road Train
62		3 Axle Rigid and 3 Axle Dolly and 3 Axle Trailer (PBS)
77		6 Axle Semitrailer and 1 Axle Dolly and 1 Axle Trailer
79		9 Axle Road Train (Type 1)
81		10 Axle Road Train (Type 1)
91		Common 12 Axle Road Train

100



3 Axle Rigid and 3 Axle Dolly and 3 Axle A Trailer and 3 Axle B Trailer (PBS)

109



3 Axle Prime Mover and 3 Axle (1 2) Group Trailer and 3 Axle Dolly and 3 Axle (1 2) Group Trailer (PBS)

111



3 Axle Prime Mover and 3 Axle (1 2) Group Trailer and 2 Axle Dolly and 3 Axle (1 2) Group Trailer (PBS)

Type 1 Road Trains: 3 Axle Prime Mover and 2 Axle Trailer and 2 Axle Dolly and 2 Axle Trailer

24



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS	
Qld	72.00 24G	-	74.00 24C	74.00 24H	-	✓ 24GE 24CE 24HE	✓ 24GES 24CES 24HES	-	68.06	74.5 ¹¹⁷	77.40	
NSW												68.15 ₁₁₈ 24CPBS
Vic	24G		24C	24H			24GE 24CE 24HE	24GES 24CES 24HES	66.06 ₁₂₀ 24GPBS	68.06 24CPBS	74.5 24HPBS	-
SA	72.00 24G		74.00 24C	74.00 24H			✓ 24GE 24CE 24HE	✓ 24GES 24CES 24HES	-	-	-	GML 75.60 CML 77.70

- For further codes with GML/CML/HML Combinations & Restrictions, refer to page 180.

¹¹⁷ PBS Road Train operate to HML between GrainCorp Fisherman Islands and Type 1 Road Train Network in Toowoomba.

¹¹⁸ PBS Truck on PBS 2A network only.

¹¹⁹ PBS HML weight site access is extremely limited and care must be taken

¹²⁰ PBS Road train can operate to 66.06t with permit on B-double routes – HML weights are extremely limited and care must be taken.

Type 1 Road Trains:

3 Axle Prime Mover and 2 Axle Trailer and 2 Axle Dolly and 3 Axle Trailer (Road train)

25



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS	
Qld	75.50	-	77.50	79.50	-	✓	✓				81.10	
NSW											-	
Vic	25G		25C	25H		25GE 25CE 25HE	25GES 25CES 25HES				-	-
SA	75.50 25G		77.50 25C	79.50 25H		✓ 25GE 25CE 25HE	✓ 25GES 25CES 25HES				GML 79.28 CML 81.38 HML 83.48	

Type 1 Road Trains:

3 Axle Prime Mover and 3 Axle Trailer and 2 Axle Dolly and 2 Axle Trailer

27



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML ¹²¹	PBS – CML ¹²²	PBS – HML	GHMS
Qld	75.50	-	77.50	79.50	-	✓	✓	76.00	78.00	-	81.10
NSW											
Vic	27G		27C	27H		-	27GE 27CE 27HE	27GES 27CES 27HES	-		
SA	75.50 27G		77.50 27C	79.50 27H		✓ 27GE 27CE 27HE	✓ 27GES 27CES 27HES	GML 79.28 CML 81.38 HML 83.48			

¹²¹ NHVR Vehicle Approval and Access Permit is required to deliver to Gladstone, Mackay and Pinkenba ports

¹²² Above permits and NVHAS mass is required

Type 1 Road Trains:

Common 11 Axle Road Train

28



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	79.00 28G	-	81.00 28C	85.00 28H	-	✓ 28GE 28CE 28HE	✓ 28GES 28CES 28HES	-	-	85.50 ¹²³	84.90
NSW										85.00 28HPBS	83.00
Vic ¹²⁴									72.70 ₁₂₅ 28CPBS	85.00 ¹²⁶ 28HPBS	-
SA									-	-	GML 82.95 CML 85.05 HML 89.25

- For further codes with GML/CML/HML Combinations & Restrictions, refer to page 180.

¹²³ Trucks are permitted to operate between Toowoomba and Port of Brisbane as PBS trucks with [Queensland Class 2 Performance Based Standards A-Double \(Toowoomba to Port of Brisbane\) Authorisation Notice 2018 \(No.1\)](#).

¹²⁴ Take care with these combinations because NHVR access permit is required to operate in Northern Victoria only – refer [Victoria Road Trains \(Non PBS\)](#).

¹²⁵ In Victoria, NHVR Access Permit required on pre-approved network, trucks can also operate on the PBS 2A network with CML at 72.7t and PBS 2A HML network at 76.7t.

¹²⁶ Limited access for some trucks on PBS network or with specific roads – care must be taken because access is extremely limited.

Type 1 Road Trains:

11 Axle Road Train

31



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	79.00	-	81.00	85.00	-	✓	✓	-	-	-	84.90
NSW											83.00
Vic	31G		31C	31H		31GE 31CE 31HE	31GES 31CES 31HES		72.70 ¹²⁷ 31CPBS	76.70 31HPBS	-
SA	79.00 31G		81.00 31C	85.00 31H		✓ 31GE 31CE 31HE	✓ 31GES 31CES 31HES		-	-	GML 82.95 CML 85.05 HML 89.25

3 Axle Prime Mover and 2 Axle Semitrailer and 3 Axle Dolly and 3 Axle Semitrailer.

¹²⁷ In Victoria, NHVR Access Permit required on pre-approved network, trucks can also operate on the PBS 2A network with CML at 72.7t and PBS 2A HML network at 76.7t.

Type 1 Road Trains:

3 Axle Rigid and 3 Axle Dolly and 3 Axle Trailer (PBS)¹²⁸

62



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld ¹²⁹	-	-	-	-	-	-	-	62.50	63.00	68.50	-
NSW ¹³⁰											
Vic								-			
SA											

¹²⁸ 3 axle trailer can be swapped with a 3 axle A trailer from a B double.

¹²⁹ Truck can operate on the B double network, or PBS HML on the PBS HML Network.

¹³⁰ Truck can operate on the PBS 2A network, or PBS HML on the PBS 2A HML Network.

Type 1 Road Trains:

6 Axle Semitrailer and 1 Axle Dolly and 1 Axle Trailer

77



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS		
Qld	60.50		62.00	63.50		✓	✓				65.00		
NSW											-		
Vic	-		-	-		-	-				-	-	-
SA	60.50 77G		62.00 77C	63.50 77H		✓ 77GE 77CE 77HE	✓ 77GES 77CES 77HES				GML 63.53 CML 65.10 HML 66.68		

Type 1 Road Trains:

9 Axle Road Train

79



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS		
Qld	68.00	-	70.00	71.50	-	✓	✓				73.10		
NSW											-		
Vic	-		-	-		-	-				-	-	-
SA	68.00 79G		70.00 79C	71.50 79H		79GE 79CE 79HE	79GES 79CES 79HES				GML 71.40 CML 73.50 HML 75.08		

Type 1 Road Trains:

10 Axle Road Train

81



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS		
Qld	71.50	-	73.50	77.00	-	✓	✓				76.90		
NSW													
Vic	-		-	-		-	-				-	-	-
SA	71.50 81G		73.50 81C				✓ 81GE 81CE				✓ 81GES 81CES		

Type 1 Road Trains:

Common 12 Axle Road Train

91



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS	
Qld	82.50 91G	-	85.50 131	90.50	-	✓ 91GE 91CE 91HE	✓ 91GES 91CES 91HES	-	-	85.50 132	88.70	
NSW			85.00							86.63		
Vic ¹³³			84.50 91C	90.50 134 91H						72.70 135	85.00 136	-
SA			90.50 91H	GML 86.63 CML 88.73 HML 95.03								

¹³¹ CML AB-triples in Qld get another 1.0 tonne because GML is heavier than 80 tonnes.

¹³² Trucks are permitted to operate between Toowoomba and Port of Brisbane as PBS trucks with [Queensland Class 2 Performance Based Standards A-Double \(Toowoomba to Port of Brisbane\) Authorisation Notice 2018 \(No.1\)](#).

¹³³ Take care with these combinations because NHVR access permit is required to operate in Northern Victoria only – refer [Victoria Road Trains \(Non PBS\)](#).

¹³⁴ Mass is possible with NHVR access permit in Northern Victoria

¹³⁵ In Victoria, NHVR Access Permit required on pre-approved network, trucks can also operate on the PBS 2A network with CML at 72.7t and PBS 2A HML network at 76.7t.

¹³⁶ Limited access for some trucks on PBS network or with specific roads – care must be taken because access is extremely limited.

Type 1 Road Trains:

3 Axle Rigid and 3 Axle Dolly and 3 Axle A Trailer and 3 Axle B Trailer (PBS)

100



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	-	-	-	-	-	-	-	-	-	91.00 ¹³⁷	-
NSW										78.40 ¹³⁸	
Vic										-	
SA										78.40 ¹³⁹	

¹³⁷ 91.0 tonnes on the PBS 3A network and 78.40 tonnes on the PBS 2B network, unless there is an access permit for the specific route

¹³⁸ Maximum permitted mass limit by permit is 78.40 tonnes on the PBS 2B network

¹³⁹ Maximum permitted mass limit by permit is 78.40 tonnes on the PBS 2B network

Type 1 Road Trains:

3 Axle Prime Mover and 3 Axle (1 2) Group Trailer and 3 Axle Dolly and 3 Axle (1 2) Group Trailer (PBS)¹⁴⁰

109



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld											
NSW											
Vic											
SA											

¹⁴⁰ NHVR PBS Access Permit is required to operate – none are current for grain trucks

Type 1 Road Trains: 3 Axle Prime Mover and 3 Axle (1 2) Group Trailer and 2 Axle Dolly and 3 Axle (1 2) Group Trailer (PBS)

111



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld								84.00 141	92.50 142	-	
NSW								84.00 143	92.50 144	-	
Vic	-	-	-	-	-	-	-	-			-
SA											

¹⁴¹ PBS Level 3 Network

¹⁴² By route only – care must be taken

¹⁴³ Type 1 A-Double HML Network

¹⁴⁴ By route only – care must be taken

4.8 B-triples

30



9 Axle B-triple Road Train

69



10 Axle B-triple Road Train

94



Common 12 Axle B-triple Road Train

97

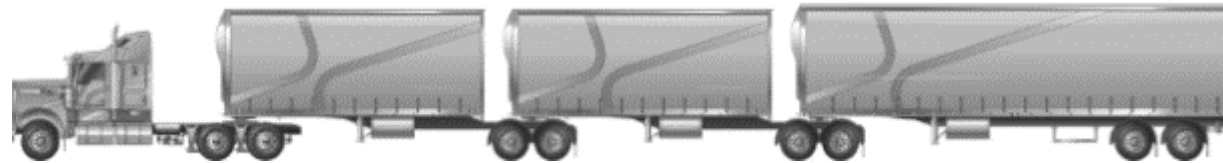


11 Axle B-triple Road Train

B-triples:

9 Axle B-triple Road Train

30



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	72.00	-	74.00	-	-	✓	✓				77.40
NSW											-
Vic	-		-			-	-				
SA	72.00 30G		74.00 30C			✓ 30GE 30CE	✓ 30GES 30CES				GML 75.60 CML 77.70

B-triples:

10 Axle B-triple Road Train

69



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS	
Qld	75.50	-	77.50	79.50	-	✓	✓				81.20	
NSW											-	
Vic	-		-	-		-	-				-	-
SA¹⁴⁵	75.50 69G		77.50 69C	79.50 69H		✓ 69GE 69CE 69HE	✓ 69GES 69CES 69HES				GML 79.28 CML 81.38 HML 83.48	

¹⁴⁵ South Australia requires PBS 3A Network permit if operating at HML.

B-triples:

Common 12 Axle B-triple Road Train

94



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld											88.70
NSW	82.50 94G	-	84.50 94C	90.50 94H	-	✓ 94GE 94CE 94HE	✓ 94GES 94CES 94HES		-		86.63
Vic											-
SA ¹⁴⁶											GML 86.63 CML 88.73 HML 95.03

¹⁴⁶ South Australia requires PBS 3A Network permit if operating at HML.

B-triples:

11 Axle B-triple Road Train

97



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	79.00	-	81.00	85.00	-	✓	✓				84.90
NSW											-
Vic	-		-	-		-	-				
SA¹⁴⁷	79.00 97G		81.00 97C	85.00 97H		✓ 97GE 97CE 97HE	✓ 97GES 97CES 97HES				GML 82.95 CML 85.05 HML 89.25

¹⁴⁷ South Australia requires PBS 3A Network permit if operating at HML.

4.9 Type 1 Road Trains with Dog Trailers

23		5 Axle Semitrailer and 3 Axle Dog Trailer (Road Train)
26		6 Axle Semitrailer and 3 Axle Dog Trailer (Road Train)
37		3 Axle Rigid Truck and 2 x 3 Axle Dog Trailers (Road Train)
38		3 Axle Rigid Truck and 4 Axle Dog Trailer and 3 Axle Dog Trailer (Road Train)
39		3 Axle Rigid Truck and 2 x 4 Axle Dog Trailers (Road Train)
40		4 Axle Twin Steer Rigid Truck and 2 x 3 Axle Dog Trailers (Road Train)
41		4 Axle Twin Steer Rigid Truck and 4 Axle Dog Trailer and 3 Axle Dog Trailer (Road Train)
42		4 Axle Twin Steer Rigid Truck and 2 x 4 Axle Dog Trailers (Road Train)
49		3 Axle Rigid Truck and 5 Axle Dog Trailer and 4 Axle Dog Trailer (PBS)
63		3 Axle Rigid Truck and 3 Axle Dog Trailer (Road Train)
72		4 Axle Twin Steer Rigid Truck and 4 Axle Dog Trailer (Road Train)

75



3 Axle Rigid Truck and 4 Axle Dog Trailer (Road Train)

103



3 Axle Rigid and 5 Axle Dog and 5 Axle Dog

104



3 Axle Prime Mover and 3 Axle Trailer and 4 Axle Dog Trailer (Road Train)

105



3 Axle Prime Mover and 2 Axle Trailer and 4 Axle Dog (Road Train)

108



3 Axle Rigid and 5 Axle Dog Trailer (Road Train)

Road Trains with Dog Trailers:

5 Axle Semitrailer and 3 Axle Dog (Road Train)

23



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	64.50		66.00			✓					69.30
NSW											
Vic	-	-	-	-	-	-	-	-	-	-	-
SA											

Road Trains with Dog Trailers:

6 Axle Semitrailer and 3 Axle Dog Trailer (Road Train)

26



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	68.00		70.00								73.10
NSW											
Vic	-	-	-	-	-	✓ 26P	-		-		-
SA ¹⁴⁸			-		63.50 26P						

¹⁴⁸ South Australia requires permit to operate.

Road Trains with Dog Trailers:

3 Axle Rigid Truck and 2 x 3 Axle Dog Trailers¹⁴⁹

37



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	-					-					
NSW	73.50					✓					
Vic		-	-	-	-		-		-		-
SA	-					-					

¹⁴⁹ Rigid trucks with 2 dog trailers can only operate in NSW

Road Trains with Dog Trailers: 3 Axle Rigid Truck and 4 Axle Dog Trailer and 3 Axle Dog Trailer (Road train)

38



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	-	-	-	-	-	-	-				
NSW	79.00		81.00			✓					
Vic	-		-			-					
SA			-			-					

Rigid trucks with 2 dog trailers can only operate in NSW.

Road Trains with Dog Trailers: 3 Axle Rigid Truck and 2 x 4 Axle Dog Trailers (Road Train)

39



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML ¹⁵⁰	PBS – HML	GHMS
Qld¹⁵¹	88.50		91.00	-		✓	✓	-	92.10	-	95.10
NSW¹⁵²	79.00		-	-				-	-	90.50 ₁₅₃	83.00
Vic	-	-	-	-	-	-	-	-	-	-	-
SA											

¹⁵⁰ On PBS 3A network with permit

¹⁵¹ Qld general access operation is permitted on the 53.5 metre Type 2 Road Train Network only

¹⁵² NSW operation is permitted on the Type 1 36.5 metre Road Train. Note that the Network National Heavy Vehicle Regulator Common Heavy Freight Vehicle Configurations chart shows up to 91.00 tonnes for this configuration and this is on the Type 2 Road Train Network only

¹⁵³ Access is permitted at PBS weights for trucks with a PBS Vehicle Approval and a NHVR access permit

Road Trains with Dog Trailers: 4 Axle Twin Steer Rigid Truck and 2 x 3 Axle Dog Trailers (Road train)

40



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	-	-	-	-	-	-	-	-	-	-	-
NSW ¹⁵⁴	72.50		74.50								
Vic	-		-								
SA			-								

¹⁵⁴ Access on the Type 1 Road Train network

Road Trains with Dog Trailers: 4 Axle Twin Steer Rigid Truck and 4 Axle Dog Trailer and 3 Axle Dog Trailer (Road train)

41



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	-		-								
NSW ¹⁵⁵	78.00		80.00								
Vic		-		-	-	-	-		-		-
SA	-		-								

¹⁵⁵ Access on the NSW Type 1 Road Train network

Road Trains with Dog Trailers: 4 Axle Twin Steer Rigid Truck 2 x 4 Axle Dog Trailers (Road train)

42



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	-		-								
NSW ¹⁵⁶	78.00		80.00								
Vic		-		-	-	-	-		-		-
SA	-		-								

¹⁵⁶ Access on the NSW Type 1 Road Train network

Road Trains with Dog Trailers: 3 Axle Rigid Truck and 5 Axle Dog Trailer and 4 Axle Dog Trailer (PBS)

49



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML ¹⁵⁷	PBS – CML	PBS – HML	GHMS
Qld								-			-
NSW								88.00			83.00
Vic	-	-	-	-	-	-	-		-	-	
SA								-			-

¹⁵⁷ Access for combination is very limited at PBS GML

Road Trains with Dog Trailers:

3 Axle Rigid Truck and 4 Axle Dog Trailer (Road Train)

63



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld ¹⁵⁸	48.00					✓					51.60
NSW		-	-	-	-		-	-	-	-	
Vic											
SA											

¹⁵⁸ Total combination length must exceed 19 metres and comply with *Queensland Class 3 Heavy Vehicle Truck Towing One Trailer Exceeding 19m Up To 31.5m Mass and Dimension Exemption Notice 2019 (No.1)* on Type 1 Road Train Routes only using either a 3 axle dog trailer or a 1 axle dolly and 2 axle trailer.

Road Trains with Dog Trailers: 4 Axle Twin Steer Rigid Truck and 4 Axle Dog Trailer (Road Train)

72



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld ¹⁵⁹	60.50										65.00
NSW		-	-	-	-	-	-	-	-	-	
Vic											-
SA											

¹⁵⁹ Total combination length must exceed 19 metres and comply with *Queensland Class 3 Heavy Vehicle Truck Towing One Trailer Exceeding 19m Up To 31.5m Mass and Dimension Exemption Notice 2019 (No.1)* on Type 1 Road Train Routes only using either a 4 axle dog trailer or a 2 axle dolly and 2 axle trailer.

Road Trains with Dog Trailers:

3 Axle Rigid Truck and 4 Axle Dog Trailer (Road Train)

75



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld ¹⁶⁰	56.00					✓					60.20
NSW		-	-	-	-		-	-	-	-	
Vic						-					-
SA											

¹⁶⁰ Total combination length must exceed 19 metres and comply with *Queensland Class 3 Heavy Vehicle Truck Towing One Trailer Exceeding 19m Up To 31.5m Mass and Dimension Exemption Notice 2019 (No.1)* on Type 1 Road Train Routes only using either a 4 axle dog trailer or a 2 axle dolly and 2 axle trailer.

Road Trains with Dog Trailers:

3 Axle Rigid and 5 Axle Dog and 5 Axle Dog

103



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	-	-	-	-	102.50 103P	-	-	-	-	-	-
NSW				-							
Vic ¹⁶¹	95.00 103G			102.00 103H		✓ 103GE 103CE 103HE					
SA											

¹⁶¹ NHVR access permit required

Road Trains with Dog Trailers: 3 Axle Prime Mover and 3 Axle Trailer and 4 Axle Dog (Road Train)

104



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld											
NSW	-				64.00 104P	-					
Vic		-	-	-				-	-	-	-
SA	63.50					✓					

Road Trains with Dog Trailers: 3 Axle Prime Mover and 2 Axle Trailer and 4 Axle Dog (Road Train)

105



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld											
NSW	-				64.00 105P	-					
Vic		-	-	-				-	-	-	-
SA	63.50					✓					

Road Trains with Dog Trailers:

3 Axle Rigid and 5 Axle Dog Trailer (Road Train)

108



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld ¹⁶²	57.00					✓					61.30
NSW											-
Vic	-	-	-	-	-	-	-	-	-	-	
SA											

¹⁶² Total combination length must exceed 19 metres and comply with *Queensland Class 3 Heavy Vehicle Truck Towing One Trailer Exceeding 19m Up To 31.5m Mass and Dimension Exemption Notice 2019 (No.1)* on Type 1 Road Train Routes only using either a 4 axle dog trailer or a 2 axle dolly and 2 axle trailer.

4.10 Type 2 Road Trains

74



Common 16 Axle 2 Axle Dolly Type 2 Road Train

78



14 Axle Road Train (Type 2)

80



15 Axle Road Train (Type 2)

89



Common 18 Axle 3 Axle Dolly Road Train (Type 2)

90



17 Axle Road Train (Type 2)

Type 2 Road Trains

Common 16 Axle 2 Axle Dolly Type 2 Road Train

74



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS			
Qld	115.50		118.50	124.50		✓	✓				128.00			
NSW	-		-	-		-	-				-	-	-	-
Vic														
SA¹⁶³	115.50 74G		118.50 74C	124.50 74H			✓ 74GE 74CE 74HE				✓ 74GES 74CES 74HES			

¹⁶³ South Australia requires a NHVR permit unless operating on the pre-approved 53.5m network.

Type 2 Road Trains

14 Axle Road Train (Type 2)

78



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	108.50		111.50	113.50		✓	✓				116.60
NSW	-	-	-	-	-	-	-				-
Vic											
SA¹⁶⁴	108.50 78G		111.50 78C	113.50 78H		✓ 78GE 78CE 78HE	✓ 78GES 78CES 78HES				GML 113.93 CML 121.28 HML 119.18

¹⁶⁴ South Australia requires a NHVR permit unless operating on the pre-approved 53.5m network.

Type 2 Road Trains

15 Axle Road Train (Type 2)

80



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS			
Qld	112.00		115.00	119.00		✓	✓				120.40			
NSW	-		-	-		-	-				-	-	-	-
Vic														
SA¹⁶⁵	112.00 80G		115.00 80C	119.00 80H			✓ 80GE 80CE 80HE				✓ 80GES 80CES 80HES			

¹⁶⁵ South Australia requires a NHVR permit unless operating on the pre-approved 53.5m network.

Type 2 Road Trains

Common 18 Axle 3 Axle Dolly Road Train (Type 2)

89



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	112.50		126.50	135.50		✓	✓				131.70
NSW	-	-	-	-	-	-	-				-
Vic											
SA¹⁶⁶	112.50 89G		126.50 89C	135.50 89H		✓ 89GE 89CE 89HE	✓ 89GES 89CES 89HES				GML 118.13 CML 132.83 HML 142.28

¹⁶⁶ South Australia requires a NHVR permit unless operating on the pre-approved 53.5m network.

Type 2 Road Trains

17 Axle Road Train (Type 2)

90



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS
Qld	119.00		122.00	130.00		✓	✓				127.90
NSW	-	-	-	-	-	-	-				-
Vic											
SA¹⁶⁷	119.00 90G		122.00 90C	130.00 90H		✓ 90GE 90CE 90HE	✓ 90GES 90CES 90HES				GML 124.95 CML 128.10 HML 136.50

¹⁶⁷ South Australia requires a NHVR permit unless operating on the pre-approved 53.5m network.

4.11 Type 2 Quads

50



17 Axle ABB-quad Road Train and 2 Axle Dolly

51



18 Axle ABB-quad Road Train and 3 Axle Dolly

52



Common 17 Axle BAB-quad Road Train and 2 Axle Dolly

53



18 Axle BAB-quad Road Train and 3 Axle Dolly

Type 2 Quads

17 Axle ABB-quad Road Train and 2 Axle Dolly

50



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS				
Qld	119.00	-	122.00	130.00	-	✓	✓				127.90				
NSW														50HPBS	
Vic	-		-	-		-	-				-	-	-		-
SA															

Type 2 Quads

18 Axle ABB-quad Road Train and 3 Axle Dolly

51



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS			
Qld	122.50	-	126.50	135.50	-	✓	✓	-	-	-	131.70			
NSW	-		-	-		-	-				-	-	-	-
Vic														
SA														

Type 2 Quads

Common 17 Axle BAB-quad Road Train and 2 Axle Dolly

52



State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS			
Qld	119.00	-	122.00	130.00	-	✓	✓	-	-	-	127.90			
NSW	-		-	-		-	-				-	-	-	-
Vic														
SA														

Type 2 Quads



18 Axle BAB-quad Road Train and 3 Axle Dolly


53




State	GML	RFS	CML	HML	Notice	0.5t Steer	1.1t Steer	PBS – GML	PBS – CML	PBS – HML	GHMS			
Qld	122.50	-	126.50	135.50	-	✓	✓				123.60			
NSW														
Vic														
SA														





5 Key Terms & Definitions

A-double	A prime mover towing a Semitrailer towing another Semitrailer connected by a converter dolly.
A-trailer	The forward Semitrailer in a heavy vehicle combination coupled by a turntable (fifth wheel) to a prime mover.
A-triple	A prime mover towing three Semitrailers. The second and third Semitrailers are each connected by a converter dolly.
AB-triple	A prime mover towing three Semitrailers. The second Semitrailer is connected by a converter dolly and the third trailer is connected by a fifth wheel located towards the rear of the preceding Semitrailer. Can also be described as a Semitrailer towing a B-double using a converter dolly.
 <p>Typical AB-triple</p>	
AAB-quad	A prime mover towing four Semitrailers. The second and third Semitrailers are connected by a converter dolly and the fourth Semitrailer is connected by a fifth wheel located towards the rear of the preceding Semitrailer. Can also be described as an A-double towing a B-double using a converter dolly.
ABB-quad	A prime mover towing four Semitrailers. The third and fourth Semitrailers are connected by a fifth wheel located towards the rear of the preceding Semitrailer and the second Semitrailer is connected by a converter dolly. Can also be described as a Semitrailer towing a B-triple using a converter dolly.
Articulated	Means having two or more rigid sections connected to one another that allows rotary movement between the sections.
Active Vehicle Module (AVM)	The AVM search on the NHVR website allows you to check in real time if a vehicle is currently nominated in the NHVAS Mass and/or Maintenance modules.
Axle	1 or more shafts positioned in a line across a vehicle, on which 1 or more wheels intended to support the vehicle turn.
Axle group	A combination of truck axles in a truck combination for a prime mover, dolly, or trailer. Typical examples are a tandem axle group, twin steer axle group, tri-axle group or quad-axle group.
B-double	A combination consisting of a prime mover towing 2 Semitrailers, with the first Semitrailer being attached directly to the prime mover by a fifth wheel coupling and the second Semitrailer being mounted on the rear of the first Semitrailer by a fifth wheel coupling on the first Semitrailer.
 <p>Typical B-double</p>	

B-trailer	A Semitrailer/s coupled via a turntable (fifth wheel) mounted on the forward semitrailer.
B-triple	A combination consisting of a prime mover towing 3 Semitrailers, all attached by a fifth wheel coupling.  <p style="text-align: center;">Typical B-triple</p>
BA-triple	A prime mover towing three Semitrailers. The second Semitrailer is connected by a fifth wheel located towards the rear of the preceding Semitrailer and the third Semitrailer is connected by a converter dolly. Can also be described as a B-double towing a Semitrailer using a converter dolly.
BAA-quad	A prime mover towing four Semitrailers. The second Semitrailer is connected by a fifth wheel located towards the rear of the preceding Semitrailer and the third and fourth Semitrailers are connected by a converter dolly. Can also be described as a B-double towing an A-double using a converter dolly.
BAB-quad	A prime mover towing four Semitrailers. The second and fourth Semitrailers are connected by a fifth wheel located towards the rear of the preceding Semitrailer and the third Semitrailer is connected by a converter dolly. Can also be described as a B-double towing a B-double using a converter dolly.
Bulk Handler	Company that loads or unloads grain trucks during or outside of harvest and is a loader, unloader, consigner or consignee under the definitions used by the HVNL. Refer 1.5 for examples about CoR parties.
Chain of Responsibility (CoR)	Chain of Responsibility is similar to the legal concept of 'duty of care' that underpins Occupational Health and Safety (OHS) law. This approach has long been used by the courts to impose liability in negligence and damages claims. Under CoR, complying with transport law is a shared responsibility and all parties in the road transport supply chain are responsible for preventing breaches. This approach recognises the effects of the actions, inactions and demands of off-the-road parties in the transport chain. Anybody – not just the driver – who has control over the transport task can be held responsible for breaches of road laws and may be legally liable.
Combination	A group of vehicles consisting of a motor vehicle such as a prime mover or rigid truck towing one or more other vehicle units such as a Semitrailer or trailer.
Commonwealth Gazette Notice	A notice published in the Commonwealth Gazette. In the context of this glossary and other documents which reference it, a notice is a Commonwealth Gazette notice unless otherwise stated e.g. notices gazetted by non-Commonwealth jurisdictions.

Concessional Mass Limit (CML)	Concessional mass limits are given to truck operators when they are audited using the NHVAS Mass process to ensure they have systems and processes to manage axle group and gross combination mass limits to allow them to have heavier overall mass. Trucks must display a sticker on the truck to operate to the heavier weight.
Converter dolly	A pig trailer with a fifth wheel coupling designed to convert a Semitrailer into a dog trailer.
	 <p>Typical converter dolly</p>
Coupling	A device used to attach a vehicle in a combination to the vehicle in front of it.
Dimension requirement	Approved width, or height or length.
Dog trailer	A trailer (including a trailer consisting of a Semitrailer and converter dolly) that has— <ul style="list-style-type: none"> • one axle group or a single axle at the front that is being steered by connection to a towing vehicle by a drawbar; and • one axle group or a single axle at the rear.
Exemption	A legal instrument used to provide alternative or non-compliance with a law, regulation or standard. For example, a vehicle standards exemption, a fatigue-related exemption (e.g. a work/rest hours exemption), or an access-related exemption. An exemption can be provided by notice or permit.
Fifth wheel coupling	A device (other than an upper rotating element and a kingpin) used with a prime mover, Semitrailer or converter dolly to— <ul style="list-style-type: none"> • permit quick coupling and uncoupling; and • provide for articulation.
Front under-run protection (FUP)	A device or barrier installed at the front of a heavy vehicle with the purpose of preventing other vehicles from being pushed underneath the front of the heavy vehicle in the event of a collision.
Gazette notice	A legal instrument that provides the Regulator with the ability to issue information, authorisations or exemptions, that apply to a certain class(es) of heavy vehicle or persons and will generally include conditions.
Grain Harvest Management Scheme (GHMS)	State-based mass management schemes to overcome some of the practical difficulties in grain transport. In particular, these relate to the efforts of operators to maximise payload while not breaching legislated heavy vehicle mass limits due to the varying moisture contents and density variances of grain.
General Mass Limit (GML)	General Mass Limits (GML) apply to all heavy vehicles. The GML state the allowable mass for all types of heavy vehicle axle groups, unless the vehicle is running under an accreditation scheme, or an exemption under the Heavy Vehicle National Law.
Grain Transport Safety Network (GTSN)	See www.gtsn.com.au

Gross Combination Mass (GCM)	<p>Means the total maximum loaded mass of a vehicle and any vehicles it may lawfully tow at any given time—</p> <ul style="list-style-type: none"> • If the Regulator has, under section 56, specified the total maximum loaded mass of the motor vehicle and any vehicles it may lawfully tow at any given time – specified by the Regulator under that section; or • Otherwise – stated by the motor vehicle’s manufacturer.
Gross Vehicle Mass (GVM)	<p>Of a vehicle, means the maximum loaded mass of the vehicle—</p> <ul style="list-style-type: none"> • If the Regulator has specified the vehicle’s maximum loaded mass under section 57—specified by the Regulator under that section; or • Otherwise—stated by the vehicle’s manufacturer.
Grain Trade Australia (GTA)	See www.graintrade.org.au
Harvest Management Scheme (HMS)	See Grain Harvest Management Scheme.
Heavy Vehicle	<p>For the purposes of the HVNL a vehicle is a heavy vehicle if it has a GVM or ATM of more than 4.5 tonnes Also, for the purposes of this Law other than in relation to registration under this Law, a combination that includes a vehicle with a GVM or ATM of more than 4.5 tonnes is a heavy vehicle. Rolling stock is not a heavy vehicle under this Law.</p>
High Productivity Freight Vehicles (HPFVs)	<p>HPFVs are large combination vehicles that offer significant benefits for lowering costs, improving safety and protecting the environment by reducing the number of truck movements that would otherwise be needed. For example, a heavy vehicle combination that exceeds 26 metres and/or has a Gross Combination Mass (GCM) of more than 68.5 tonnes.</p>
Higher Mass Limit (HML)	<p>A mass exception under the HVNL which allows higher mass limits on approved routes for particular vehicles or vehicle combinations dependent on other conditions being met (e.g. IAP and/or road friendly suspension may need to be fitted to the vehicle).</p>
Heavy Vehicle National Law (HVNL)	<p>An Australian law with the purpose of regulating the heavy vehicle industry including registration, driver fatigue, vehicle standards, mass dimension and loading, compliance and enforcement and access.</p>
Intelligent Access Program (IAP)	<p>IAP is a program to allow heavy vehicles to have access, or improved access, to the road network in return for monitoring, by an intelligent transport system, of their compliance with stated access conditions.</p>
Mass limits	<p>The maximum allowable mass of an axle or axle group, vehicle or vehicle combination. Common mass limit regimes include general mass limits, concessional mass limits and higher mass limits.</p>
Mass requirement	<p>Approved mass limit or mass exception.</p>

National Heavy Vehicle Accreditation Scheme (NHVAS)	<p>NHVAS is voluntary and open to operators who can demonstrate a record of compliance with heavy vehicle regulation and standards. Operators can apply for accreditation under the following NHVAS modules:</p> <ul style="list-style-type: none"> • Mass Management • Maintenance Management • Basic Fatigue Management (BFM) • Advanced Fatigue Management (AFM) <p>To be eligible for accreditation under NHVAS, operators must agree to abide by the NHVAS standards and business rules and provide documentary and audit evidence that they comply with the relevant NHVAS standards. The maximum period for which the Regulator may grant heavy vehicle accreditation is 3 years.</p>
National Heavy Vehicle Regulator (NHVR)	The independent body established under the Heavy Vehicle National Law (HVNL) to administer that law.
Performance Based Standards (PBS)	An alternative compliance scheme for heavy vehicles setting minimum performance levels for safe and efficient operation (as opposed to standard prescriptive rules). Greater access is generally afforded for higher performance.
Notice	A legal instrument used to provide alternative or non-compliance with a law, regulation or standard.
Pig trailer	A trailer with 1 axle group or a single axle near the middle of its load carrying surface; and connected to the towing vehicle by a drawbar.
	
Example pig trailer	
Prime mover	A heavy motor vehicle designed to tow a Semitrailer
	
Typical prime mover	
Quad-axle group	A group of 4 axles, in which the horizontal distance between the centre-lines of the outermost axles is more than 3.2m but not more than 4.9m.
	
$3.2m < d < 4.9m$	
Typical quad-axle group	
Road Friendly Suspension (RFS)	A suspension system certified as a road friendly suspension system by the Vehicle Safety Standards Branch of the Commonwealth Department Infrastructure and Regional Development in accordance with VSB11.
Rigid	Not articulated.
	

Typical rigid (truck only)

Road train A B-triple, or a combination, other than a B-double, consisting of a motor vehicle towing at least 2 trailers, excluding any converter dolly supporting a Semitrailer.



Typical road train

Route A set of connection roads and infrastructure allowing a vehicle to travel from one location to another.

Semitrailer A trailer that has 1 axle group or a single axle towards the rear, and a means of attachment to a prime mover that results in some of the mass of the trailer's load being imposed on the prime mover.



Typical semitrailer

Single axle 1 axle or 2 axles with centres between transverse, parallel, vertical planes spaced less than 1.0m apart.



Typical single axle group

Site An owned or leased property where a business has overall management control or influence, for example, bulk handler country site, domestic end user, farm storage, feedlot, port terminal.

Tandem axle group A group of at least 2 axles, in which the horizontal distance between the centre-lines of the outermost axles is at least 1m but not more than 2m.



$$1\text{m} < d < 2\text{m}$$

Typical tandem axle group

















Tri-axle group A group of at least 3 axles, in which the horizontal distance between the centre-lines of the outermost axles is more than 2m but not more than 3.2m.
































$$2\text{m} < d < 3.2\text{m}$$





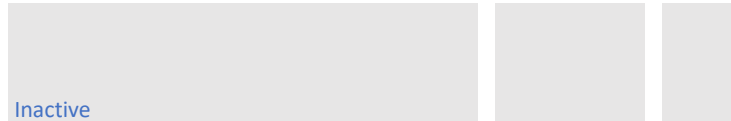




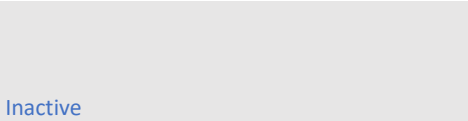

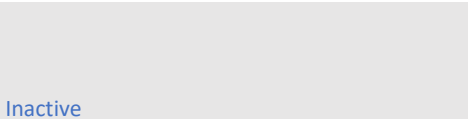



Typical tri-axle group

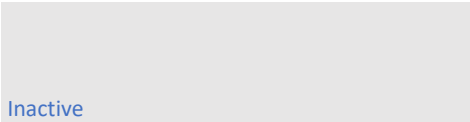

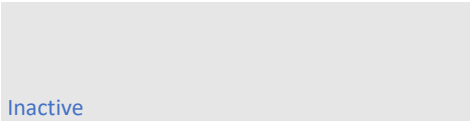













6 Truck Code Quick Lookup Table (by number)


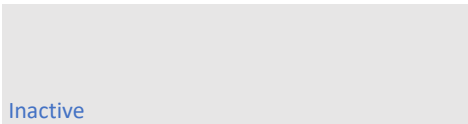














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3	 Common 4 Axle Semitrailer	Semitrailers	Page 89	4	 5 Axle Semitrailer	Semitrailers	Page 90
5	 2 Axle Rigid Truck and 2 Axle Pig Trailer	Truck and Pig Trailers	Page 78	6	 2 Axle Rigid Truck and 3 Axle Pig Trailer	Truck and Pig Trailers	Page 79
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13	 3 Axle Rigid Truck and 2 Axle Pig Trailer	Truck and Pig Trailers	Page 80	14	 3 Axle Rigid Truck and 3 Axle Pig Trailer	Truck and Pig Trailers	Page 81
15	 3 Axle Rigid Truck and 2 Axle Dog Trailer	Truck & Dogs	Page 63	16	 3 Axle Rigid Truck and 3 Axle Dog Trailer	Truck & Dogs	Page 64



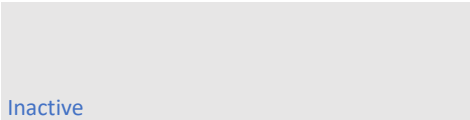












17	 3 Axle Twin Steer Rigid Truck	Rigid Trucks	Page 55	18	 4 Axle Twin Steer Rigid Truck	Rigid Trucks	Page 56
19	 4 Axle Twin Steer Rigid Truck and 2 Axle Pig Trailer	Truck and Pig Trailers	Page 82	19	 4 Axle Twin Steer Rigid Truck and 3 Axle Pig Trailer	Truck and Pig Trailers	Page 82
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23	 5 Axle Semitrailer and 3 Axle Dog Trailer (Road Train)	Type 1 Road Trains with Dog Trailers	Page 140	24	 3 Axle Prime Mover and 2 Axle Trailer and 2 Axle Dog Trailer and 2 Axle Trailer	Type 1 Road Trains	Page 120
25	 5 Axle Prime Mover and 2 Axle Dolly and 3 Axle Trailer (Road Train)	Type 1 Road Trains	Page 121	26	 6 Axle Semitrailer and 3 Axle Dog Trailer (Road Train)	Type 1 Road Trains with Dog Trailers	Page 141
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29	 8 Axle B-double	B-doubles	Page 100	30	 9 Axle B Triple 9 Axle B-triple Road Train	B-triples	Page 134
31	 11 Axle Road Train	Type 1 Road Trains	Page 124	32	 4 Axle Tri Drive Rigid Truck and 5 Axle Dog (PBS)	Truck & Dogs	Page 67

33	 4 Axle Prime Mover and 4 Axle Semitrailer (PBS)	Semitrailers	Page 94	34	 3 Axle Prime Mover and 4 Axle Semitrailer (PBS)	Semitrailers	Page 95
35	 4 Axle Twin Steer Rigid Truck and 1 Axle Dog Trailer	Truck and Pig Trailers	Page 84	36	 5 Axle Twin Steer Rigid Truck	Rigid Trucks	Page 57
37	 3 Axle Rigid Truck and 2 x 3 Axle Dog Trailers (Road Train)	Type 1 Road Trains with Dog Trailers	Page 142	38	 3 Axle Rigid Truck and 4 Axle Dog Trailer and 3 Axle Dog Trailer (Road Train)	Type 1 Road Trains with Dog Trailers	Page 143
39	 3 Axle Rigid Truck and 2 x 4 Axle Dog Trailers (Road Train)	Type 1 Road Trains with Dog Trailers	Page 144	40	 4 Axle Twin Steer Rigid Truck and 2 x 3 Axle Dog Trailers (Road Train)	Type 1 Road Trains with Dog Trailers	Page 145
41	 4 Axle Twin Steer Rigid Truck and 4 Axle Dog Trailer and 3 Axle Dog Trailer (Road train)	Type 1 Road Trains with Dog Trailers	Page 146	42	 4 Axle Twin Steer Rigid Truck 2 4 Axle Dog Trailers (Road Train)	Type 1 Road Trains with Dog Trailers	Page 147
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7 GML/CML/HML Combinations & Restrictions

CODE	CONFIGURATION	STATE	MASS
12HR2	45.00 (6 Axle Semitrailer GML truck / HML trailer)	NSW	45.00
12N1	43.00 (6 Axle Semitrailer HML truck / GML trailer)	SA	43.00
		VIC	
12N1E	43.50 (6 Axle Semitrailer HML truck / GML trailer+0.5)	SA	43.50
13GR	31.00 (3 Axle Rigid & 2 Axle Pig Restricted GML)	SA	31.00
		VIC	
24HR1	73.00 (9 Axle A-Double HML truck / GML dolly & trailers)	SA	73.00
28HR1	83.00 (11 Axle A-Double - HML truck & trailer + CML dolly & trailer)	SA	83.00
28HR1E	83.50 (11 Axle A-Double - HML truck & trailer + CML dolly & trailer+0.5)	SA	83.50
28HR1ES	84.10 (11 Axle A-Double - HML truck & trailer + CML dolly & trailer+1.1)	SA	84.10
68HR1	65.50 (9 Axle B-Double HML truck & trailer / GML trailer)	SA	65.50
		VIC	
68HR1E	66.00 (9 Axle B-Double HML truck & trailer / GML trailer+0.5)	SA	66.00
		VIC	
68HR2	66.50 (9 Axle B-Double HML truck & trailer / CML trailer)	SA	66.50
68HR2E	67.00 (9 Axle B-Double HML truck & trailer / CML trailer+0.5)	SA	67.00
68HR3	65.50 (9 Axle B-Double HML truck / GML trailer / HML trailer)	SA	65.50
		VIC	
68HR3E	66.00 (9 Axle B-Double HML truck / GML trailer / HML trailer+0.5)	SA	66.00
		VIC	
84GR	30.70 (3 Axle Rigid & 1 Axle Pig Restricted GML)	SA	30.70
96HR1	110.00 (15 Axle AB-Triple Restricted HML)	SA	110.00
		VIC	

8 Viterra Mass Limit Code Acronyms

No.	Representing the type of truck
G	General Mass Limit (GML)
C	Concessional Mass Limit (CML) – must be registered in NHVAS and be on HML route
H	Higher Mass Limit (HML) – must be registered in NHVAS and be on HML route
GPBS	Performance Based Standards GML refer 3.7 Performance based standards (PBS)
CPBS	Performance Based Standards CML refer 3.7 Performance based standards (PBS)
HPBS	Performance Based Standards HML refer 3.7 Performance based standards (PBS)
GHMS	Grain Harvest Mass Scheme refer 3.12 Grain harvest management scheme (GHMS)
GHMSE	Grain Harvest Mass Scheme + 0.5t steer axle allowance
E	0.5t steer axle allowance refer 3.4 Steer allowances
ES	1.1t steer axle allowance refer 3.4 Steer allowances
LS	Load Share Suspension on Twin Steer
RFS	Road Friendly Suspension refer 3.11 Road friendly suspension (RFS)
N	Notice
P	Permit
R	Restricted weight

Example



Viterra code = 96HES

96 = truck type

H = Higher Mass Limit

ES = 1.1t steer axle allowance

For further codes with GML/CML/HML Combinations & Restrictions, refer to page 180.

9 Acknowledgements

The GTSN would like to acknowledge the member companies for their contributions to the development of this Truck Book.

AN ORGANISATION THAT WANTS TO ACTIVELY CONTRIBUTE TO THE STRATEGIC DIRECTION OF THE GRAIN HEAVY VEHICLE SUPPLY CHAIN.



GTSN TRUCK BOOK