

## PBS Vehicle Approval

Heavy Vehicle National Law Section 23

Heavy Vehicle (General) National Regulation Section 17

### IMPORTANT

- This vehicle must be operated under a Notice or an access permit unless compliant with the Specified PBS Vehicle provision.
- The driver must carry a copy of this PBS Vehicle Approval and an associated access permit or notice and be able to produce readable copies (electronic or hard copy) if requested by Authorised Officers.
- All vehicle units in a combination (prime movers, trailers, dollies, etc.) must be listed on this VA.
- The driver must be able to identify the specific combination being driven within the VA.
- Failure to comply with the above can incur penalties for the operator and driver.

2 April 2025

**Ref No: PBS – VA19616 – V220225 – v1A**

This PBS Vehicle Approval modifies any previously issued approval for the vehicle(s) listed herein operating under Design Application Number V220225 .

Design Approval Holder	Robert Smedley SMEDLEY'S ENGINEERS PTY LTD	Address	110 Highett St Richmond VIC 3121
------------------------	--	---------	-------------------------------------

Design Application	V220225	Vehicle	3-axle truck 4-axle dog
Load	Quarry and Bulk; Woodchip; Waste; Unladen; Other	Length (mm)	≤ 19550
Assessor	Andrej Bucko	Height (mm)	≤ 4300

## Combination Matrix

For each Truck and Trailer, the corresponding drawing reference number, dimension set number and mass table number/s are listed below. The dimension set number e.g., 'Variant 18A' indicates the maximum allowable payload heights and/or allowable tyre options for the corresponding Truck and Trailer - refer to the Operating Conditions and Approved Tyre Options sections on this VA.

New VINs added in this VA are listed in bold.

Truck 1	Make	GCM (t)
<b>6FMTR1GR6RD815298</b>	MAC	70

Trailer 1	ATM (t)
<b>6F80000000B131816</b>	34

	Trailer 1
Truck 1	TRA3F9_103 Variant 18A Table 1, 2

**Table 1**  
**Truck 1 and Trailer 1**

Mass Limits	Level 1		Axle Group Masses	Level 1
				GML
GML (t)	50.5		Steer (t)	6.5
CML (t)	NA		Drive (t)	16.5
HML (t)	NA		Trailer Front (t)	13.75
Bridge Assessment	Tier 1		Trailer Rear (t)	13.75

**Table 2**  
**Truck 1 and Trailer 1**

Mass Limits	Level 2		Axle Group Masses	Level 2		
				GML	CML	HML
GML (t)	56.0		Steer (t)	6.5	6.5	6.5
CML (t)	57.5		Drive (t)	16.5	17.0	17.0
HML (t)	57.5		Trailer Front (t)	16.5	17.0	17.0
Bridge Assessment	Tier 1		Trailer Rear (t)	16.5	17.0	17.0

## Operating conditions

The NHVR approves the vehicles listed herein for the level(s) shown in the “Mass Limits” table with the following operating conditions:

1. The total combination mass must not exceed the limits in the “Mass Limits” table.
2. The axle group masses must not exceed the limits in the “Axle Group Masses” table.
3. If the “Mass Limits” table specifies Tier 2 or Tier 3, a bridge assessment is required.
4. Maximum payload heights measured from the ground must not exceed: (m)

Variant 18A Level 1	Truck	
	Drive and trailer tyres with a load rating of no less than 144	
	Deck height ≤ 1400mm	
	Base of heap	Peak of heap
Water level	2.750	2.750
Heaped 1	2.665	2.830
Heaped 2	2.575	2.910
Heaped 3	2.475	2.990
Heaped 4	2.365	3.070
Heaped 5	2.240	3.150

Variant 18A Level 1	Trailer	
	Drive and trailer tyres with a load rating of no less than 144	
	Deck height ≤ 1500mm	
	Base of heap	Peak of heap
Water level	2.700	2.700
Heaped 1	2.615	2.780
Heaped 2	2.520	2.860
Heaped 3	2.420	2.940
Heaped 4	2.305	3.020
Heaped 5	2.170	3.100

Variant 18A Level 2	Truck	
	Drive and trailer tyres with a load rating of no less than 144	
	Deck height $\leq$ 1400mm	
	Base of heap	Peak of heap
Water level	2.755	2.755
Heaped 1	2.670	2.835
Heaped 2	2.580	2.915
Heaped 3	2.480	2.995
Heaped 4	2.370	3.075
Heaped 5	2.250	3.155

Variant 18A Level 2	Trailer	
	Drive and trailer tyres with a load rating of no less than 144	
	Deck height $\leq$ 1500mm	
	Base of heap	Peak of heap
Water level	2.710	2.710
Heaped 1	2.625	2.790
Heaped 2	2.530	2.870
Heaped 3	2.430	2.950
Heaped 4	2.315	3.030
Heaped 5	2.185	3.110

5. If fitted with Hendrickson HT230 suspension, the load rating of the drive and trailer tyres must be at least 144.
6. 6.5 tonne complying steer axle requirements:
  - an engine that complies with the engine emission standards of Australian Design Rule (ADR) 80/01 (Euro 4) or a later version of ADR 80; and
  - a front underrun protection device (FUPD) that complies with UN ECE Regulation 93 or ADR 84; and
  - a cabin that complies with UN ECE Regulation 29.
7. Concessional Mass Limits (CML) requirements:
  - a National Heavy Vehicle Accreditation Scheme (NHVAS) – Mass Management Accreditation must be in force for all motor vehicles listed on this vehicle approval.
8. Higher Mass Limits (HML) requirements:
  - for tandem axle groups, road friendly suspensions.
9. When operating at Level 1, there is a minimum mass requirement for the drive axle group. The mass on the drive axle group must be at least 26% of the total combination mass e.g. at 50.5t total combination mass,  $50.5 \times 0.26 = 13.13\text{t}$  is required on the drive axle group. This clause does not apply to an unladen vehicle.
10. When operating at Level 2, there is a minimum mass requirement for the drive axle group. The mass on the drive axle group must be at least 20% of the total combination mass e.g. at 56t total combination mass,  $56 \times 0.2 = 11.2\text{t}$  is required on the drive axle group. This clause does not apply to an unladen vehicle.

## Exemptions

*Heavy Vehicle National Law Section 24*

*Heavy Vehicle (General) National Regulation Section 28*

The following table lists exemptions from prescribed vehicle standards that have been granted for the vehicle(s) in this vehicle approval.

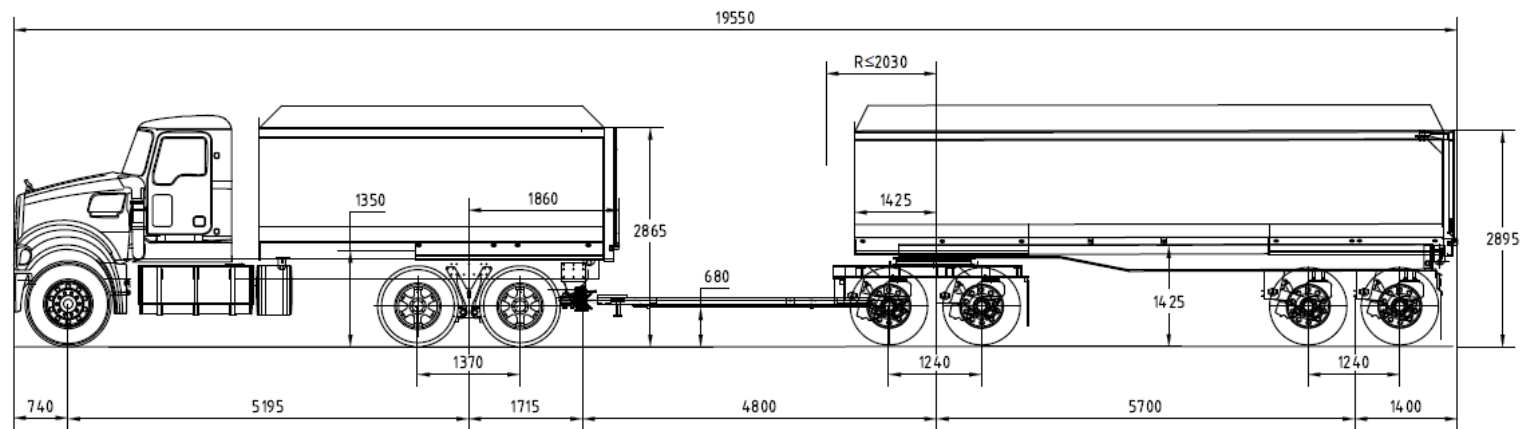
Exemptions	
ADR	NA
HV(MDL)NR	Schedule 6, Section 3 (Length – General)
HV(VS)NR	NA




ADR                      Australian Design Rules

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

HV(VS)NR              *Heavy Vehicle (Vehicle Standards) National Regulation*

TRUCK 1  
TRAILER 1



					ALL DIMENSIONS IN mm UNLESS SPECIFIED TOLERANCES UNLESS SPECIFIED ± 20 mm	 www.smedleys.co engineers@smedleys.co 110 HIGHETT ST, RICHMOND, VIC 3121	ER250709 - TRAILER SALES - HAWGOOD PBS LAYOUT DRAWING - VEHICLE UNLADEN R12D22 - QUAD DOG - V220225
A	INITIAL ISSUE	JJ		28/03/25	 DO NOT SCALE	 THIS DRAWING AND DESIGN REMAINS THE PROPERTY OF SMEDLEY'S ENGINEERS PTY LTD AND MUST NOT BE COPIED, LOANED OR OTHERWISE USED WITHOUT THE EXPRESSED PERMISSION OR LICENCE IN WRITING. RETURN IMMEDIATELY UPON ITS REQUEST TO DO SO. ALL COPIES OF THIS DRAWING IN THE POSSESSION OF THE RECIPIENT OTHER THAN THOSE REQUIRED FOR THE RECIPIENT'S RECORDS AND ANY UNAUTHORIZED USE OF THIS DRAWING INCLUDING ITS REPRODUCTION IN THREE DIMENSIONAL FORM, MAY CONSTITUTE A VIOLATION OF THE COPYRIGHT ACT 1968	
REV.	DESCRIPTION	DRAWN	APPR.	DATE	AS1100:1992	DRAWN JJ	DATE: 28/03/25 SCALE: No Scale SIZE: A4 SHEET: 1 of 1 DWG No: TRA3F9_103

## Approved tyre options – Variant 18A (Lower Payload Heights Apply)

### Steer –

- **295/80R22.5** (Load Index **149** or higher, single configuration)
- **305/70R22.5** (Load Index **149** or higher, single configuration)
- **315/70R22.5** (Load Index **149** or higher, single configuration)
- **315/80R22.5** (Load Index **149** or higher, single configuration)
- **385/55R22.5** (Load Index **149** or higher, single configuration)
- **385/65R22.5** (Load Index **149** or higher, single configuration)

### Drive –

- **11R22.5** (Load Index **140** or higher, dual configuration)
- **275/70R22.5** (Load Index **140** or higher, dual configuration)
- **295/80R22.5** (Load Index **140** or higher, dual configuration)
- **305/70R22.5** (Load Index **140** or higher, dual configuration)

### Trailer –

- **11R22.5** (Load Index **140** or higher, dual configuration)
- **275/70R22.5** (Load Index **140** or higher, dual configuration)
- **295/80R22.5** (Load Index **140** or higher, dual configuration)
- **305/70R22.5** (Load Index **140** or higher, dual configuration)

Tyre load index and inflation pressure must be appropriate for the axle mass (inflation pressures must be within legal inflation limits)

Retread tyres are only permitted on the drive, dolly, and trailer axles.

Tyres listed herein are specific for PBS application number V220225.

A different list of tyres will apply for other combination types and different PBS application numbers.



## Approved tyre options – Variant 18A

### Steer –

- **295/80R22.5** (Load Index **149** or higher, single configuration)
- **305/70R22.5** (Load Index **149** or higher, single configuration)
- **315/70R22.5** (Load Index **149** or higher, single configuration)
- **315/80R22.5** (Load Index **149** or higher, single configuration)
- **385/55R22.5** (Load Index **149** or higher, single configuration)
- **385/65R22.5** (Load Index **149** or higher, single configuration)

### Drive –

- **11R22.5** (Load Index **144** or higher, dual configuration)
- **275/70R22.5** (Load Index **144** or higher, dual configuration)
- **295/80R22.5** (Load Index **144** or higher, dual configuration)
- **305/70R22.5** (Load Index **144** or higher, dual configuration)

### Trailer –

- **11R22.5** (Load Index **144** or higher, dual configuration)
- **275/70R22.5** (Load Index **144** or higher, dual configuration)
- **295/80R22.5** (Load Index **144** or higher, dual configuration)
- **305/70R22.5** (Load Index **144** or higher, dual configuration)

Tyre load index and inflation pressure must be appropriate for the axle mass (inflation pressures must be within legal inflation limits)

Retread tyres are only permitted on the drive, dolly, and trailer axles.

Tyres listed herein are specific for PBS application number V220225.


A different list of tyres will apply for other combination types and different PBS application numbers.

## Axle spacings for as-built combinations - Truck and Dog (1-2-2-2)

Truck	Trailer	1-2	2-3	3-4	4-5	5-6	6-7	OAL
1	1	4510	1370	5210	1240	4460	1240	19550

## Declaration

I, Laszlo Bruzsa Chief Engineer, delegate of the National Heavy Vehicle Regulator, approve this PBS Vehicle Approval PBS–V220225 –VA19616.



Laszlo (Les) Bruzsa

Chief Engineer

National Heavy Vehicle Regulator

Dated: 02/04/25

## Revision table

N	VA	Vers	Brief description	Date
1	19616	1A	First issue.	02/04/25

## General access for a specified PBS vehicle

The vehicle combination(s) listed in this PBS Vehicle Approval qualify for general access to the road network under the *specified PBS vehicle* provisions of the Heavy Vehicle National Law. A specified PBS vehicle must comply with all applicable requirements of Schedule 1 of the *Heavy Vehicle (Mass, Dimension and Loading) National Regulation* (HV(MDL)NR).

## Specified PBS vehicle mass limits

1. The maximum allowable mass of a specified PBS vehicle is the lesser of the maximum PBS Level 1 GML stated in this Vehicle Approval and the relevant mass limit prescribed in Part 1, section 2, Schedule 1 of the HV(MDL)NR.
2. The maximum allowable mass of an axle group on a specified PBS vehicle is the lesser of the maximum PBS Level 1 GML axle group mass limit stated in this Vehicle Approval and the axle group mass limit prescribed in “Table 1—Axle mass limits table” in Schedule 1 of the HV(MDL)NR.
3. The maximum allowable mass between any two axles or axle groups on a specified PBS vehicle is the relevant prescribed mass limit in “Table 2—Axle spacing mass limits general table” in Schedule 1 of the HV(MDL)NR.

## Specified PBS vehicle operating conditions

1. When operating as a general access vehicle, a specified PBS vehicle must comply with all operating conditions of its Vehicle Approval that apply at Level 1. This includes payload heights, the drive axle mass requirement, approved tyre options and all operating conditions that do not specify a level of access.
2. The regulation includes a requirement about towing ratios. Loading and unloading must be managed so that the trailer mass does not exceed the mass of the towing vehicle.

## For more information

For more information visit our [PBS vehicle access permit page](#) under Access management.

## Disclaimer

The information on this page is general guidance only and does not constitute legal advice. Consider whether you require Independent legal advice to address your particular circumstances.

## Important information

The driver must keep in the driver's possession a copy of this Vehicle Approval and be able to produce it for inspection by compliance officers. Penalties can apply.

If changes or modifications are required, these are limited to the specifications contained in the relevant PBS Design Approval and the Application for Design Approval Part A and B. Contact the applicant (see the cover page on this document) for information related to the allowed specifications.

A change of components and/or dimensions must be certified by an approved [PBS Certifier](#) and an updated version of this Vehicle Approval must be obtained. A change of tyres, outside of the list contained on this Vehicle Approval, also requires approval but will not require an inspection by a PBS Certifier.

If VA contains multiple tyre option tables, all tyre selections must be chosen from the same tyre options table. Tyres from different tyre options tables are not interchangeable.

## Road access

The PBS Vehicle Approval is not an authorisation to access the road network. You must comply with the relevant Notice or obtain an access permit. To apply for an access permit, visit the [NHVR Portal](#).

For more information on PBS Notices visit:

[National Class 2 PBS Level 1 & 2a Truck and Dog Trailer Authorisation Notice 2021 \(No.1\)](#)

[National Class 2 Performance Based Standards \(High Productivity\) Authorisation Notice](#)

[National Class 2 Performance Based Standards \(Tier 1\) Authorisation Notice 2021](#)

If you add vehicles to your PBS Vehicle Approval, the PBS Vehicle Approval number may change depending on the new vehicles added. If the PBS Vehicle Approval number has changed, and your access permit references a PBS Vehicle Approval number, your access permit will need to be amended to reflect the latest Vehicle Approval number. Note that most truck and dog access permits will not reference a PBS Vehicle Approval number and therefore changes to the Vehicle Approval do not require an update to the access permit. For more information, watch [Adding vehicles to a PBS Vehicle Approval](#) video on our YouTube channel.

For more information, please visit our website at [www.nhvr.gov.au](http://www.nhvr.gov.au) or call 13 NHVR (13 64 87).

For queries relating to this document please contact the PBS Operations Team at [pbs@nhvr.gov.au](mailto:pbs@nhvr.gov.au).

## Manage your PBS Vehicle Approval

Please visit our [website](#) to view a list of available options and associated forms to manage your PBS Vehicle Approval.