

PBS Vehicle Approval

Heavy Vehicle National Law Section 23
Heavy Vehicle (General) National Regulation Section 17

IMPORTANT

- This is a <u>restricted access vehicle</u> you must comply with a Notice or operate under an access permit.
- The driver must carry a copy of this PBS Vehicle Approval and an associated access permit (if applicable).
- The driver must be able to produce readable copies (electronic or hard copy) of this VA and access permit 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.

25 September 2024

Ref No: PBS - VA17593 - V131006 - v1A

This PBS Vehicle Approval modifies any previously issued approval for the vehicle(s) listed herein operating under Application Number V131006 and is a modification of VA12063.

Design Approval Holder	Ed Wallis Australian Trailer Solutions Group	Address	233-243 Learmonth Rd Wendouree VIC 3355
Application Number	V131006	Vehicle	A-Double (3-2-3)
Load	Quarry and Bulk	Length (mm)	≤ 30360
Assessor	Andrej Bucko (ARRB)	Height (mm)	≤ 4300



Combination Matrix

For each Prime Mover and Trailer Set, the corresponding drawing reference number, dimension set number and mass table number/s are listed below. The dimension set number e.g., 'Option 4' indicates the maximum allowable payload heights and/or allowable tyre options for the corresponding Prime Mover and Trailer Set refer to the Operating Conditions and Approved Tyre Options sections on this VA.

New VINs added in this VA are listed in bold.

Prime Mover 1	Make	GCM (t)	Prime Mover 2	Make	GCM (t)
6F5000000LA467694	KW	97	6F5000000JA462969	KW	97
6F5000000LA469203					

Prime Mover 3	Make	GCM (t)
6F5000000RA487157	KW	131

Lead Trailer 1	ATM (t)	Lead Trailer 2	ATM (t)
6F80000000L107905	42	6F80000000L102980	44

Dolly 1	ATM (t)	Dolly 2	ATM (t)
6F80000000L108836	18.5	6F80000000B114977	18.5

Rear Trailer 1	ATM (t)	Rear Trailer 2	ATM (t)
6F80000000L107904	42	6F80000000L102979	42

Trailer Sets				
Trailer Set 1	Lead Trailer 1	Dolly 1	Rear Trailer 1	
Trailer Set 2	Lead Trailer 2	Dolly 2	Rear Trailer 2	

	Trailer Set 1	Trailer Set 2
Prime Mover 1	Option 4	Option 4
Prime Mover 1	Table 1, 2	Table 1, 3
Duine Mayon 2	Option 4	Option 4
Prime Mover 2	Table 1, 4	Table 1, 5
	MOL01_001	MOL01_001
Prime Mover 3	Option 4	Option 4
	Table 1, 6	Table 1, 7



Table 1
Prime Mover 1, 2, 3 and Trailer Set 1, 2

Mass Limits	Level 2
Load 1 (t)	75.1
GML (t)	79.5
CML (t)	81.5
HML (t)	85.0
Bridge Assessment	Tier 2/3

Axle Group	Level 2				
Masses	Load 1	GML	CML	HML	
Steer (t)	6.5	6.5	6.5	6.5	
Drive (t)	16.5	16.5	17.0	17.0	
Lead Trailer (t)	20.0	20.0	21.0	22.5	
Dolly (t)	14.1	16.5	17.0	17.0	
Rear Trailer (t)	18.0	20.0	21.0	22.5	

Table 2
Prime Mover 1 and Trailer Set 1

Mass Limits	Level 2
Load 1 (t)	70.95
GML (t)	70.95
CML (t)	72.95
HML (t)	76.95
Bridge Assessment	Tier 1

Axle Group		Lev	el 2	
Masses	Load 1	GML	CML	HML
Steer (t)	6.5	6.5	6.5	6.5
Drive (t)	16.5	16.5	17.0	17.0
Lead Trailer (t)	20.0	20.0	21.0	22.5
Dolly (t)	14.1	16.5	17.0	17.0
Rear Trailer (t)	18.0	20.0	21.0	22.5
* The mass across	axle groups	s is limited t	0 –	
Axle Groups	Load 1	GML	CML	HML
2 to 4	-	52.90	54.90	56.40
2 to 5	64.45	64.45	66.45	70.45
3 to 5	-	54.40	56.40	59.90



Table 3
Prime Mover 1 and Trailer Set 2

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Mass Limits	Level 2			
Load 1 (t)	70.65			
GML (t)	70.65			
CML (t)	72.65			
HML (t)	76.65			
Bridge Assessment	Tier 1			

Axle Group		Level 2			
Masses	Load 1	GML	CML	HML	
Steer (t)	6.5	6.5	6.5	6.5	
Drive (t)	16.5	16.5	17.0	17.0	
Lead Trailer (t)	20.0	20.0	21.0	22.5	
Dolly (t)	14.1	16.5	17.0	17.0	
Rear Trailer (t)	18.0	20.0	21.0	22.5	
* The mass across	axle groups	s is limited t	0 –		
Axle Groups	Load 1	GML	CML	HML	
2 to 4	-	52.70	54.70	56.20	
2 to 5	64.15	64.15	66.15	70.15	
3 to 5	-	52.70	54.70	56.20	

Table 4
Prime Mover 2 and Trailer Set 1

Mass Limits	Level 2
Load 1 (t)	71.1
GML (t)	71.1
CML (t)	73.1
HML (t)	77.1
Bridge Assessment	Tier 1

Axle Group	Level 2				
Masses	Load 1	GML	CML	HML	
Steer (t)	6.5	6.5	6.5	6.5	
Drive (t)	16.5	16.5	17.0	17.0	
Lead Trailer (t)	20.0	20.0	21.0	22.5	
Dolly (t)	14.1	16.5	17.0	17.0	
Rear Trailer (t)	18.0	20.0	21.0	22.5	
* The mass across	* The mass across axle groups is limited to –				
Axle Groups	Load 1	GML	CML	HML	
2 to 5	64.60	64.60	66.60	70.60	
3 to 5	-	54.40	56.40	59.90	



Table 5 Prime Mover 2 and Trailer Set 2

Mass Limits	Level 2
Load 1 (t)	70.8
GML (t)	70.8
CML (t)	72.8
HML (t)	76.8
Bridge Assessment	Tier 1

Axle Group	Level 2			
Masses	Load 1	GML	CML	HML
Steer (t)	6.5	6.5	6.5	6.5
Drive (t)	16.5	16.5	17.0	17.0
Lead Trailer (t)	20.0	20.0	21.0	22.5
Dolly (t)	14.1	16.5	17.0	17.0
Rear Trailer (t)	18.0	20.0	21.0	22.5
* The mass across	axle groups	s is limited t	0 –	
Axle Groups	Load 1	GML	CML	HML
2 to 4	-	52.85	54.85	56.35
2 to 5	64.30	64.30	66.30	70.30
3 to 5	-	54.30	56.30	59.80

Table 6
Prime Mover 3 and Trailer Set 1

Mass Limits	Level 2
Load 1 (t)	71.05
GML (t)	71.05
CML (t)	73.05
HML (t)	77.05
Bridge Assessment	Tier 1

Axle Group		Level 2			
Masses	Load 1	GML	CML	HML	
Steer (t)	6.5	6.5	6.5	6.5	
Drive (t)	16.5	16.5	17.0	17.0	
Lead Trailer (t)	20.0	20.0	21.0	22.5	
Dolly (t)	14.1	16.5	17.0	17.0	
Rear Trailer (t)	18.0	20.0	21.0	22.5	
* The mass across axle groups is limited to –					
Axle Groups	Load 1	GML	CML	HML	
2 to 5	64.55	64.55	66.55	70.55	
3 to 5	-	54.40	56.40	59.90	



Table 7
Prime Mover 3 and Trailer Set 2

Mass Limits	Level 2
Load 1 (t)	70.75
GML (t)	70.75
CML (t)	72.75
HML (t)	76.75
Bridge Assessment	Tier 1

Axle Group	Level 2			
Masses	Load 1	GML	CML	HML
Steer (t)	6.5	6.5	6.5	6.5
Drive (t)	16.5	16.5	17.0	17.0
Lead Trailer (t)	20.0	20.0	21.0	22.5
Dolly (t)	14.1	16.5	17.0	17.0
Rear Trailer (t)	18.0	20.0	21.0	22.5
* The mass across	axle groups	s is limited t	0 –	
Axle Groups	Load 1	GML	CML	HML
2 to 4	-	52.75	54.75	56.25
2 to 5	64.25	64.25	66.25	70.25
3 to 5	-	54.30	56.30	59.80



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)

Option 4	Lead Trailer		tion 4 Lead Trailer		Rear ⁻	Гrailer
Load 1	Base of heap Peak of heap		Base of heap	Peak of heap		
Water level	3.680	NA	3.650	NA		
Heaped 1	3.300	4.020	3.270	3.990		

Option 4	Lead Trailer		Rear Trailer	
GML	Base of heap Peak of heap		Base of heap	Peak of heap
Water level	3.680	NA	3.340	NA
Heaped 1	3.300	4.020	2.950	3.670

Option 4	Lead ⁻	Trailer	Rear Trailer		
CML	Base of heap	Peak of heap	Base of heap	Peak of heap	
Water level	3.550	NA	3.260	NA	
Heaped 1	3.150	3.870	3.040	3.760	

Option 4	Lead ⁻	Trailer	Rear Trailer		
HML	Base of heap	Peak of heap	Base of heap	Peak of heap	
Water level	3.530	NA	3.220	NA	
Heaped 1	3.150	3.870	2.830	3.560	

- 5. 6.5 tonne Steer axle concession:
 - An engine that complies with the engine emission standards of Australian Design Rule (ADR) 80/01 (Euro 4); and
 - o Front Underrun Protection Device (FUPD) that complies with UN ECE Regulation 93; and
 - A cabin that complies with the strength requirements of UN ECE Regulation 29.
- 6. Concessional Mass Limits (CML) requirements:
 - National Heavy Vehicle Accreditation Scheme (NHVAS) Mass Management Module.



- 7. Higher Mass Limits (HML) requirements:
 - For tandem axles groups, road friendly suspensions;
 - For tri-axle groups, National Heavy Vehicle Accreditation Scheme (NHVAS) Mass Management Module and road friendly suspensions.
- 8. 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 79.5t total combination mass, $79.5 \times 0.2 = 15.9t$ is required on the drive axle group. This clause does not apply to an unladen vehicle.
- 9. If overall length exceeds 22m but does not exceed 30m, a "LONG VEHICLE" sign must be displayed at the rear of the vehicle.
- 10. If drawbar length exceeds 5m, the outermost surface of the drawbar must be fitted with yellow reflective material that complies with Class C material requirements of United National Economic Commission for Europe Regulation No. 104 Uniform provisions concerning the approval of retro-reflective markings for vehicles of category M, N and O.
- 11. Due to the vehicle's length (Combinations over 30m) exceeding the maximum permitted length for Level 2 access as prescribed by the Network Classification Guidelines, the access of this vehicle will be limited and an individual route assessment will be required. The operation of the vehicle on the road network will require a permit subject to Road Manager Consent, unless otherwise specified by the Road Manager.

Exemptions

Heavy Vehicle National Law Section 24
Heavy Vehicle (General) National Regulation Section 28

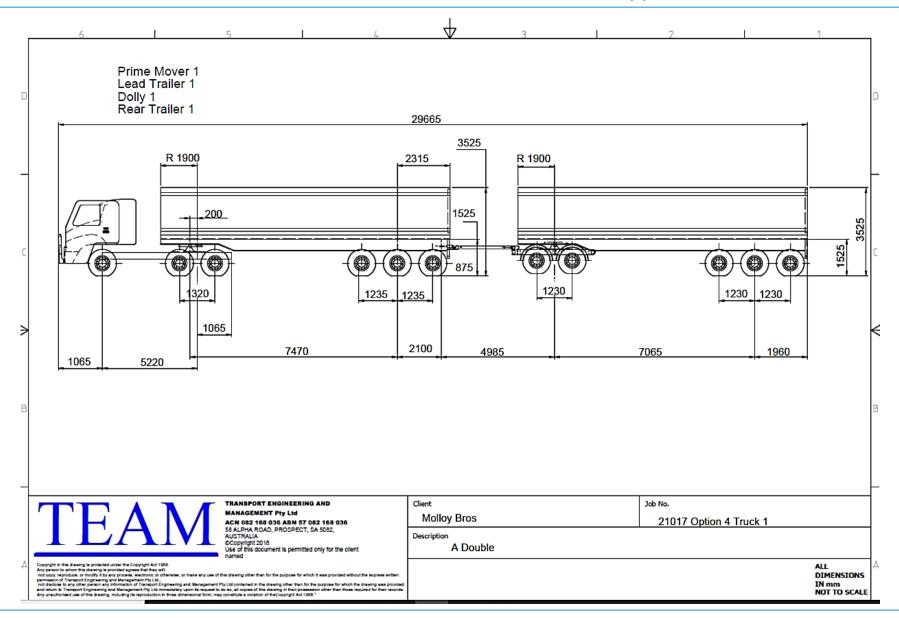
The following table lists exemptions from prescribed vehicle standards that have been granted for the vehicle(s) in this vehicle approval.

Exemptions				
ADR Rule 43, Clause 6.2.2 (Drawbar length – Trailers)				
	Rule 63, Clause 5.1 (Tow coupling location)			
HV(MDL)NR	Schedule 6, Section 6 (Length – Trailer drawbars)			
HV(VS)NR	Schedule 3, Section 29 (Attachment of couplings and drawbar eyes on road trains)			
ADR	Australian Design Rules			
HV(MDL)NR	Heavy Vehicle (Mass, Dimension and Loading) National Regulation			

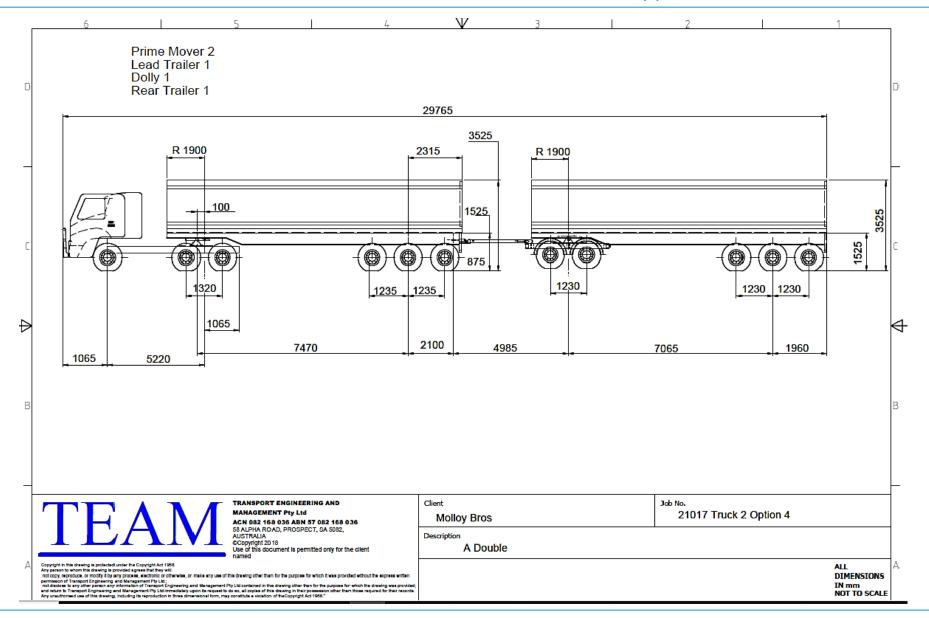
Heavy Vehicle (Vehicle Standards) National Regulation

HV(VS)NR

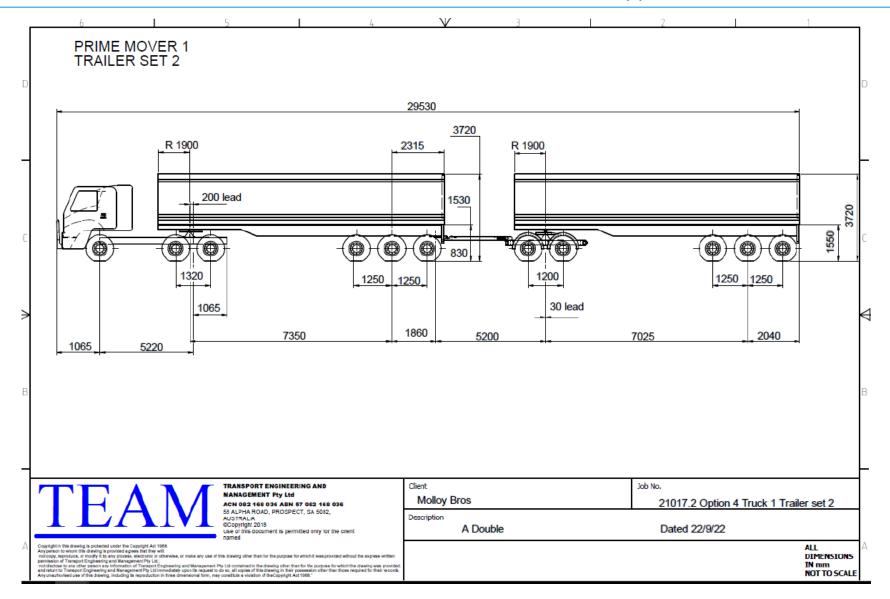




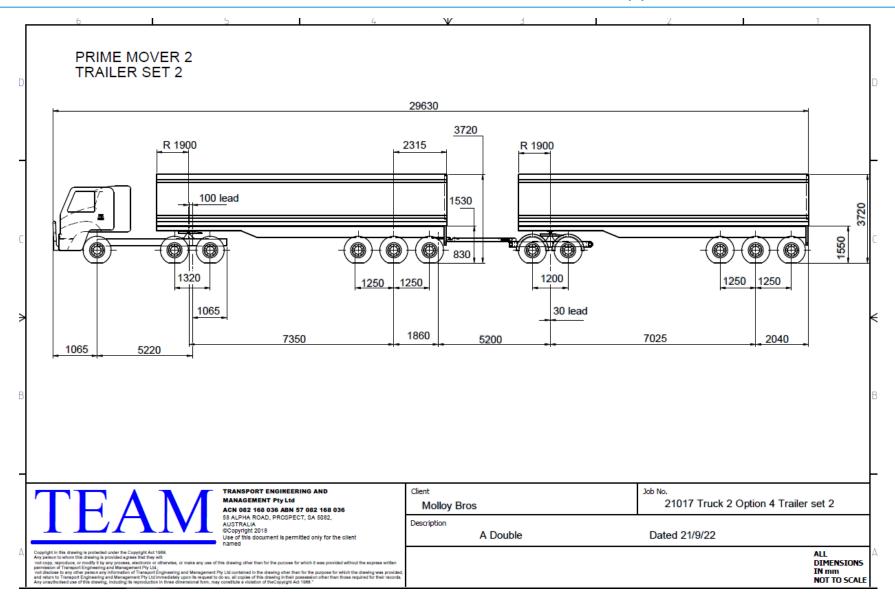




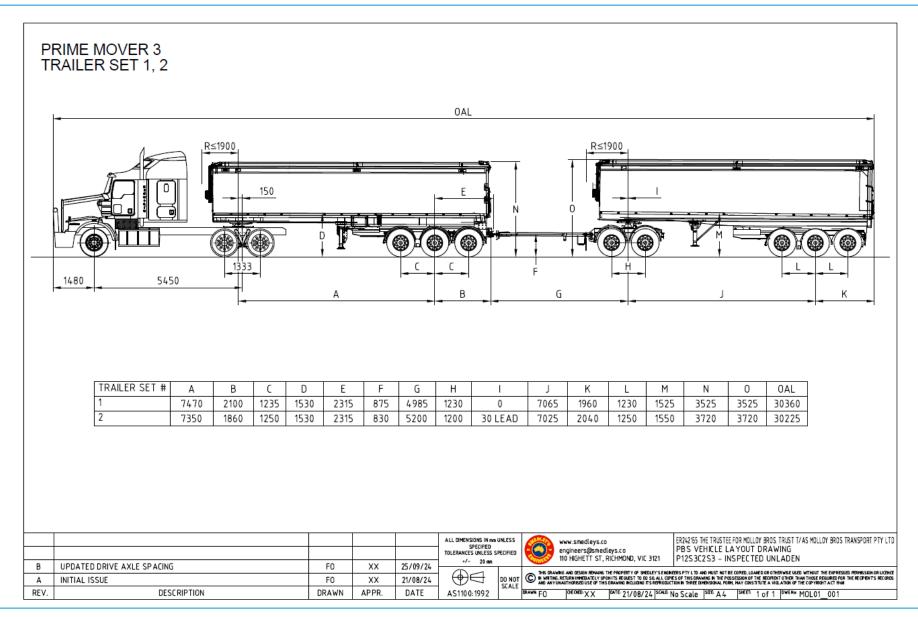














Approved tyre options

Steer -

6.5t axle mass limit

- o 295/80R22.5 (Load Index 150 or higher, single configuration)
- o 315/80R22.5 (Load Index 156 or higher, single configuration)
- o 385/65R22.5 (Load Index 158 or higher, single configuration)
- o 305/70R22.5 (Load Index 150 or higher, single configuration)

Drive -

- o 11R22.5 (Load Index 142 or higher, dual configuration)
- o **315/80R22.5** (Load Index **150** or higher, dual configuration)
- o 305/70R22.5 (Load Index 148 or higher, dual configuration)

Trailer -

o 11R22.5 (Load Index 142 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 <u>drive</u>, <u>dolly</u>, and <u>trailer</u> axles.

Tyres listed herein are specific for PBS application number V131006.

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

Axle spacings for as-built combinations - A-double (1-2-3-2-3)

PM	TS	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	OAL
1	1	4560	1320	5375	1235	1235	5235	1230	5220	1230	1230	29665
1	2	4560	1320	5240	1250	1250	5210	1200	5145	1250	1250	29530
2	1	4560	1320	5475	1235	1235	5235	1230	5220	1230	1230	29765
2	2	4560	1320	5340	1250	1250	5210	1200	5145	1250	1250	29630
3	1	4784	1333	5419	1235	1235	5235	1230	5220	1230	1230	30360
3	2	4784	1333	5284	1250	1250	5210	1200	5145	1250	1250	30225



Declaration

I, Laszlo Bruzsa Chief Engineer, delegate of the National Heavy Vehicle Regulator, approve this PBS Vehicle Approval PBS–V131006 –VA17593.

Laszlo (Les) Bruzsa Chief Engineer

National Heavy Vehicle Regulator

Dated: 25/09/24

Revision table

N	VA	Vers	Brief description	Date
1	9393	1A	First issue.	14/07/21
2	12063	1A	Adding 2x trailers, 1x dolly to VA9393 (additional VINs listed in bold).	05/10/22
3	17593	1A	Adding 1x prime mover to VA12063 (additional VINs listed in bold).	25/09/24



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 <u>PBS Certifier</u> 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 or call 13 NHVR (13 64 87).

For queries relating to this document please contact the PBS Operations Team at pbs@nhvr.gov.au.

Manage your PBS Vehicle Approval

Please visit our <u>website</u> to view a list of available options and associated forms to manage your PBS Vehicle Approval.