

Performance-Based Standards (PBS) Vehicle Approval

Heavy Vehicle National Law Section 23

Heavy Vehicle (General) National Regulation Section 17

This is not an authorisation to access the road network.
You must comply with the relevant Notice or if required, obtain an access permit.

1 July 2021

Ref No: PBS – V170620 – VA5664 – Hercules Engineering (Vic) / Bayrange Logistics – v2A

This PBS Vehicle Approval modifies any previously issued approval for the vehicle(s) listed herein operating under Application Number V170620.

| | | | |
|-------------------|---|----------|--|
| Applicant details | Malcolm Hall Hercules Engineering (Vic) 87 Canterbury Rd Kilsyth VIC 3137 | Operator | Bayrange Logistics 530 Coramba Rd Karangi NSW 2450 |
|-------------------|---|----------|--|

| | | | |
|--------------------|-----------------|-------------|-------------------------|
| Application Number | V170620 | Vehicle | 3-axle truck 4-axle dog |
| Load | Quarry and Bulk | Length (mm) | ≤ 19000 |
| Assessor | Daniel Nolan | Height (mm) | ≤ 4300 |

Combination matrix

For each truck and trailer, the corresponding drawing and dimension set number is listed. The dimension set number (e.g. Original Blueprint) indicates the maximum allowable payload heights and/or allowable tyre options for the specific combination (refer to payload height operating conditions and approved tyre options). Additional vehicle units are listed in bold.

| Truck 1 |
|-------------------|
| 6F5000000JA462458 |
| 6F5000000JA463857 |
| 6F5000000JA463858 |

| Trailer 1 |
|--------------------------|
| 6T9T24V86J0AFH095 |
| 6T9T24V86J0AFH174 |
| 6T9T24V86J0AFH175 |
| 6T9T24V86MAAFH037 |

| Truck 1 | Trailer 1 |
|---------|--|
| | DRG: GP0117 Original Blueprint Table 1 |

Table 1

Truck 1 and Trailer 1

| Mass Limits | Level 2 |
|-------------------|---------|
| GML (t) | 55.5 |
| CML (t) | 57.0 |
| HML (t) | 57.0 |
| Bridge Assessment | Tier 1 |

| Axle Group Masses | Level 2 | |
|---|---------|------------|
| | GML | CML HML |
| Steer (t) | 6.5 | 6.5 |
| Drive (t) | 16.5 | 17.0 |
| Trailer Front (t) | 16.5* | 17.0* |
| Trailer Rear (t) | 16.5* | 17.0* |
| * The trailer mass is limited to – ○ 32.5t at Level 2 GML ○ 33.5t at Level 2 CML/ HML | | |

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 bin heights measured from the ground must not exceed: (m)

| | Truck | Trailer |
|---|-------|---------|
| 1 | 2.860 | 2.830 |

5. Maximum payload heights measured from the ground must not exceed: (m)

| Original Blueprint | Truck | Trailer |
|--------------------|-------|---------|
| | 3.050 | 3.050 |

The payload height must be contained within the vehicle body height.

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:
 - National Heavy Vehicle Accreditation Scheme (NHVAS) – Mass Management Module.
8. Higher Mass Limits (HML) requirements:
 - for tandem axles groups, road friendly suspensions.
9. When the trailer mass exceeds the truck mass, at least 16 tonnes on the drive axle group is required. This clause does not apply for an unladen vehicle.

Exemptions

Heavy Vehicle National Law Section 24

Heavy Vehicle (General) National Regulation Section 28

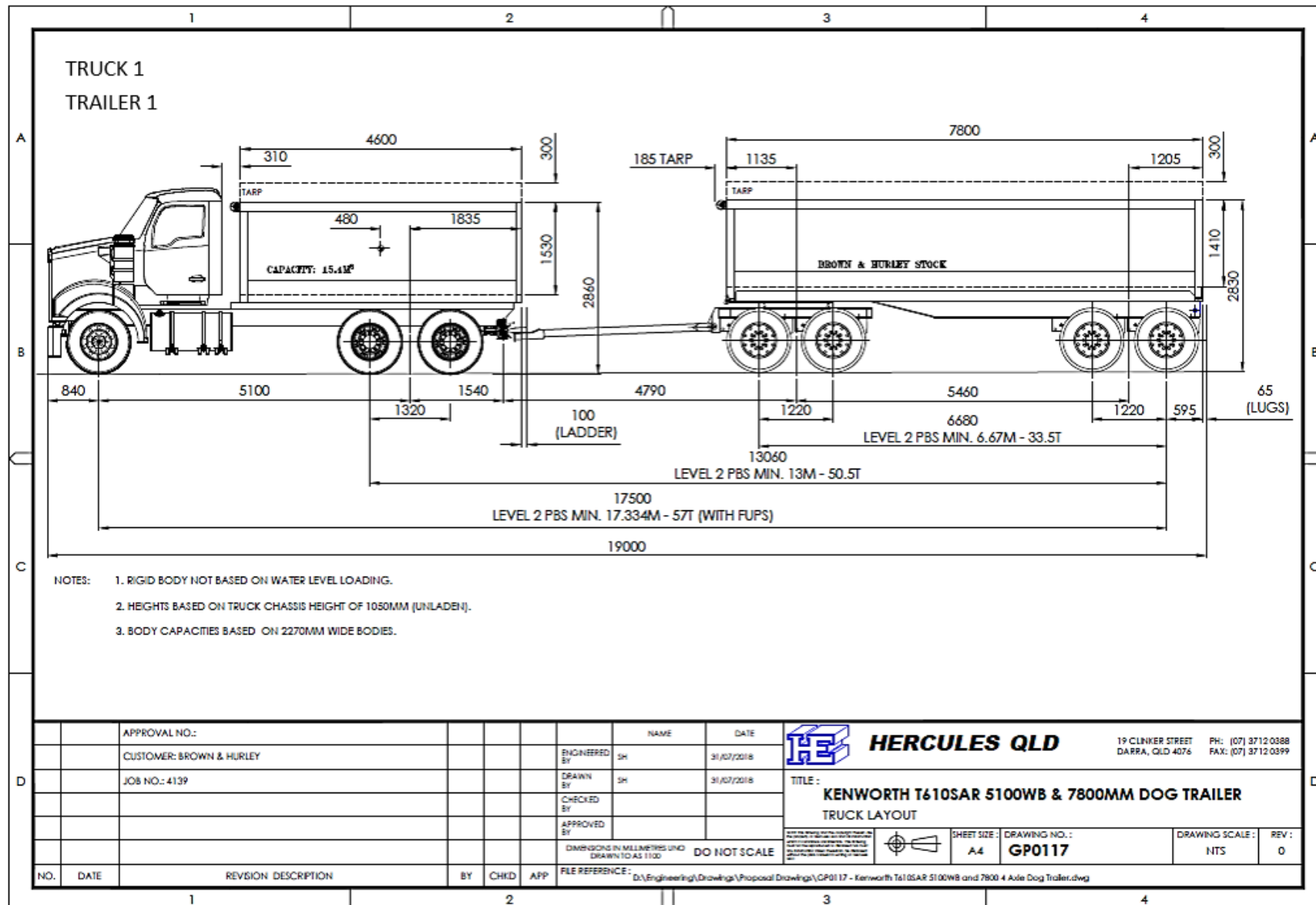
The following table lists exemptions from prescribed vehicle standards that have been granted for the vehicle(s) in this vehicle approval.

| Exemptions | |
|------------|----|
| ADR | NA |
| HV(MDL)NR | NA |
| 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*



Details of truck(s) or prime mover(s) – Truck 1

| | |
|--|---|
| Make | Kenworth |
| Model | T610SAR |
| VIN(s) | 6F5000000JA462458 6F5000000JA463857 6F5000000JA463858 |
| Engine make/ model/ rating | Cummins / X15-550 - 578hp / 2,508Nm – ADR80/03 |
| Transmission make/ model | Eaton / RTLO-20918B |
| Differential make/ model/ FD ratio | Meritor / RT46-160GP / FDR – 4.30:1 |
| Suspension make/ model (Steer) | Kenworth / Parabolic |
| Suspension make/ model (Drive) | Kenworth / Airglide 460 RF2012 |
| Tyres make/ size/ model (Steer) | 295/80R22.5 Bridgestone R150 II |
| Tyres make/ size/ model (Drive) | 11R22.5 Bridgestone M766 |
| Brakes (Load Proportioning, ABS, ECB, etc.) | ABS |
| Tow coupling make/ D rating | Ringfeder 303aus – 320kN / 35.00 tonne |
| Wheelbase (mm) | 5100 |
| Vehicle height (Measured from the ground) (mm) | 2860 |
| Number of axles | 3 |
| ADR category | NC |
| GVM (kg) | 26,500 |
| GCM (kg) | 97,000 |
| Comments/ notes: | |

Details of trailer(s) or dolly(s) – Trailer 1a

| | |
|--|---|
| Type | Drawbar Trailer |
| Make | Hercules Engineering |
| Model | 4 Axle Tipper Dog |
| VIN(s) | 6T9T24V86J0AFH095 6T9T24V86J0AFH174 6T9T24V86J0AFH175 |
| Suspension make/ model | TMC / LMV-Series RF2035 |
| Tyres make/ size/ model | 11R22.5 Hankook TH22 |
| Drawbar length (mm) | 4790 |
| Coupling make/ D rating | Ballrace BPW DK90-16 / 60,000 |
| Brakes (Load Proportioning, ABS, ECB, etc.) | ABS on 2 nd & 4 th Axles |
| Wheelbase (mm) | 5460 |
| Vehicle height (Measured from the ground) (mm) | 2830 |
| Number of axles | 4 |
| ADR category | TD |
| ATM (kg) | 35,000 |
| Comments/ notes: | |

Details of trailer(s) or dolly(s) – Trailer 1b

| | |
|--|--|
| Type | Drawbar Trailer |
| Make | Hercules Engineering |
| Model | 4 Axle Tipper Dog |
| VIN(s) | 6T9T24V86MAAFH037 |
| Suspension make/ model | TMC / LMV-Series RF2035 |
| Tyres make/ size/ model | 11R22.5 Hankook TH22 |
| Drawbar length (mm) | 4790 |
| Coupling make/ D rating | Ballrace BPW DK90-16 / 60,000 |
| Brakes (Load Proportioning, ABS, ECB, etc.) | ABS / EBS on 2 nd & 4 th Axles |
| Wheelbase (mm) | 5460 |
| Vehicle height (Measured from the ground) (mm) | 2830 |
| Number of axles | 4 |
| ADR category | TD |
| ATM (kg) | 35,000 |
| Comments/ notes: | |

Approved tyre options

Steer –

- non-brand specific 22.5-inch rim diameter

Drive –

- non-brand specific 22.5-inch rim diameter

Trailer –

- non-brand specific 22.5-inch rim diameter

Retread tyres are permitted.

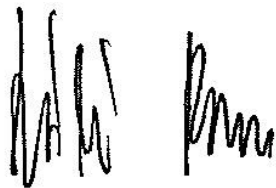
Tyre load ratings must be appropriate for the axle mass.

Tyres listed herein are specific for PBS application number V170620

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

Declaration

I, Laszlo Bruzsa Chief Engineer, delegate of the National Heavy Vehicle Regulator approves this PBS Vehicle Approval PBS–V170620 –VA5664.



Laszlo (Les) Bruzsa

Chief Engineer

National Heavy Vehicle Regulator

Dated: 01/07/21

Revision table

| N | VA | Vers | Brief description | Date |
|---|------|------|--|----------|
| 1 | 5664 | 1 | First issue. Adding 2x trucks, 2x trailers to VA5236 (additional VINs listed in bold). | 06/11/18 |
| 2 | 5664 | 2A | Adding 1x trailer to VA5664 (additional VINs listed in bold). | 01/07/21 |

Important information

As per Heavy Vehicle National Law Section 153, 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 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.

Road access

This is not an authorisation to access the road network. You must comply with the relevant Notice or obtain an access permit.

Please note that if you add vehicles to a PBS Vehicle Approval you will need to update the access permit to reflect the latest Vehicle Approval. If the new vehicles have different masses or dimensions to what is already approved, the NHVR will have to seek Road Manager consent again; which may extend the time required to issue the new permit.

For more information on the PBS Truck and Dog Notice visit [National class 2 PBS level 1 and 2A truck and dog trailer authorisation notice 2016](#).

To apply for an access permit, visit the [NHVR Portal](#). You must supply a route ID when applying for an access permit. Use Route Planner to obtain your route ID, you can do this as part of the permit application process in the [NHVR Portal](#).

For further assistance please visit our website at www.nhvr.gov.au or call 1300 MYNHVR (1300 696 487).

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

Transfer of Vehicle Approval

When applying for an access permit for a PBS vehicle, a PBS Vehicle Approval must be in the name of the company that operates the vehicle on the road.

If/ when a PBS combination is sold, the PBS Vehicle Approval has to be transferred across to the new owner.

To transfer a PBS Vehicle Approval to a new owner, use a [Vehicle Approval transfer application form](#).